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[US/US]; 411 West Prospect Street, Seattle, WA 98105 (US).

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(74) Agents: **KING, Joshua** et al.; Graybeal Jackson Haley LLP, Suite 350, 155 - 108th Avenue Northeast, Bellevue, WA 98004-5901 (US).

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(71) Applicant (*for all designated States except US*): **LIFESPAN BIOSCIENCES, INC.** [US/US]; 2401 Fourth Avenue, Suite 900, Seattle, WA 98121 (US).

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(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **BURMER, Glenna, C.** [US/US]; 7516-55th Place Northeast, Seattle, WA 98115 (US). **ROUSH, Christine, L.** [US/US]; 5301 Eight Avenue Northeast, Seattle, WA 98105 (US). **BROWN, Joseph, P.**

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(54) Title: ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS (GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH ANTIGENIC PEPTIDES

(57) Abstract: The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known antibodies.

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**ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS  
(GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH  
ANTIGENIC PEPTIDES**

**5 CROSS-REFERENCE TO RELATED APPLICATIONS**

**[1]** The present application claims priority from United States provisional patent application No. 60/257,144, filed December 19, 2000 and presently pending.

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**[2]** The following is a Table of Contents to assist review of the present application:

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**SCREENING FOR/WITH ANTIGENIC PEPTIDES:**

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**IMMUNOFLUORESCENCE ASSAY:**

**35 BEAD AGGLUTINATION ASSAYS:**

**ENZYME IMMUNOASSAYS:**

**SANDWICH ASSAY:**

**SEQUENTIAL AND SIMULTANEOUS ASSAYS:**

**IMMUNOSTICK (DIP-STICK) ASSAYS:**

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**IMMUNOFILTRATION ASSAYS:**

**BIOSENSOR ASSAYS:**



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#### (i) Polyclonal Antibodies

ANTIBODY PREP - POLYCLONAL:

ANTIBODY PREP - ADJUVANTS (ALL ABS):

10 (ii) Monoclonal Antibodies

ANTIBODY PREP - MONOCLONAL:

MOABS - COMBINATORIAL:

HUMANIZED MOAB:

15 ANTIBODY SUBSTITUTIONS - NON-IMMUNOGLOBULIN POLYPEPTIDES  
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CHIMERICS:

ANTIBODY LABELING (ALL ABS):

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ANTIBODIES - DIABODIES:

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30 BEFORE LPHIC:

LPHIC:

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ASSAYS:

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10 ABSTRACT

[3]

## BACKGROUND

[4] G protein-coupled receptors (GPCRs) are a large group of proteins that transmit signals across cell membranes. In general terms, GPCRs function somewhat like doorbells.  
15 When a molecule outside the cell contacts the GPCR (pushes the doorbell), the GPCR changes its shape and activates "G proteins" inside the cell (similar to the doorbell causing the bell to ring inside the house, which in turn causes people inside to answer the door). GPCRs are like high-security doorbells because each GPCR responds to only one specific kind of signaling molecule (called its "endogenous ligand"), kind of like a high-tech door  
20 lock that responds to only one fingerprint. Part of the GPCR is located outside the cell (the "extracellular domain"), part spans the cell's membrane (the "transmembrane domain"), and part is located inside the cell (the "intracellular domain"). Thus, GPCRs are embedded in the outer membrane of a cell and recognize and bind certain signaling molecules that are present in the spaces surrounding the cell. GPCRs are used by cells to keep an eye on the cells' own  
25 activity and on the environment. In organisms that have many cells, the cells use GPCRs to talk to each other.

[5] GPCRs are important to the pharmaceutical industry and other industries. For example, many drugs, including some antibody-based drugs, act by binding to specific GPCRs and initiating or inhibiting their intracellular actions, and diagnostics and therapeutics  
30 based on GPCRs or on antibodies for GPCRs are becoming increasingly important.

[6] General concepts about GPCRs are discussed in more scientific terms in the following paragraphs.

[7] The GPCR superfamily has at least 250 members, Strader et al., FASEB J., 9:745-754 (1995); Strader et al., Annu. Rev. Biochem., 63:101-32 (1994). GPCRs play important

roles in diverse cellular processes including cell proliferation and differentiation, leukocyte migration in response to inflammation, gene transcription, vision (the rhodopsins), smell (the olfactory receptors), neurotransmission (muscarinic acetylcholine, dopamine, and adrenergic receptors), and hormonal response (luteinizing hormone and thyroid-stimulating hormone receptors). Strader et al., *supra*; U.S. Patent nos. 5,994,097 and 6,063,596. Many important  
5 drugs produce their therapeutic actions through their interaction with GPCRs.

[8] Nucleotide and amino acid sequences for many GPCRs have been reported and can be found in public databases such as GenBank and GenPept. Generally speaking, different GPCRs show both structural and sequence similarities. The most conserved domains of  
10 GPCRs are the transmembrane domains and the first two cytoplasmic loops. GPCRs range in size from under 400 to over 1000 amino acids. Coughlin, S. R., Curr. Opin. Cell Biol. 6:191-197 (1994). They contain seven hydrophobic transmembrane regions that span the cellular membrane and form a bundle of antiparallel alpha helices. McKee K.K., *supra*. The bundle of helices forming the transmembrane regions provide many structural and functional  
15 features of the receptor. In most cases, the bundle of helices form a pocket that binds a signaling molecule. However, when the binding site accommodates larger molecules, the extracellular N-terminal segment or one or more of the three extracellular loops participate in binding and in subsequent induction of conformational change in the intracellular portions of the receptor. These helices are joined at their ends by three intracellular and three  
20 extracellular loops. GPCRs also contain cysteine disulfide bridges between the second and third extracellular loops, an extracellular N-terminus, and a cytoplasmic or intracellular C-terminus. The N-terminus is often glycosylated, while the C-terminus is generally phosphorylated. A conserved, acidic-Arg-aromatic triplet present in the second cytoplasmic loop may interact with G Proteins. Most GPCRs contain a characteristic consensus pattern.  
25 Watson, S. and S. Arkininstall, The G protein Linked Receptor Facts Book, Academic Press, San Diego, CA (1994); Bolander, F. F. Molecular Endocrinology, Academic Press, San Diego, CA (1994).

[9] Although GPCRs have many features in common, each GPCR has its own unique characteristics as well. GPCRs have varying nucleotide and amino acid sequences, and  
30 varying antigenicity. GPCRs bind a diverse array of specific, extracellular signaling molecules (which can also be referred to as "ligands") including peptides, cytokines, hormones, neurotransmitters, growth factors, and specialized stimuli such as photons,

flavorants, and odorants. Identified ligands include, for example, purines, nucleotides (*e.g.*, adenosine, cAMP, NTPs), biogenic amines (*e.g.*, epinephrine, norepinephrine, dopamine, histamine, noradrenaline, serotonin), acetylcholine, peptides (*e.g.*, angiotensin, calcitonin, chemokines, corticotropin releasing factor, galanin, growth hormone releasing hormone, gastric inhibitory peptide, glucagon, neuropeptide Y, neurotensin, opioids, thrombin, secretin, somatostatin, thyrotropin releasing hormone, vasopressin, vasoactive intestinal peptide), lipids and lipid-based compounds (*e.g.*, cannabinoids, platelet activating factor), excitatory and inhibitory amino acids (*e.g.*, glutamate, GABA), ions (*e.g.*, calcium), and toxins.

[10] In general, a GPCR binds only one type of signaling molecule and GPCRs are classified according to subfamilies based upon their selectivity and specificity for a particular ligand. When the ligand for a receptor is not known, the receptor is known as an orphan receptor. The extracellular domain interacts with or binds to certain signaling molecules or ligands located outside of the cell. The binding of a ligand to the extracellular domain alters the conformation of the receptor's intracellular domain causing the activation of a G protein. The G protein then activates or inactivates a separate plasma-membrane-bound enzyme or ion channel. This chain of events alters the concentration of one or more intracellular messengers (second messengers) such as cyclic AMP (cAMP), inositol triphosphate, diacylglycerol, or  $\text{Ca}^{2+}$ . These, in turn, alter the activity of other intracellular proteins such as cAMP-dependent protein kinase and  $\text{Ca}^{2+}$ /calmodulin-dependent protein kinases, leading to the transduction and amplification of the original extracellular signal. Baldwin, J.M., Curr. Opin. Cell Biol. 6:180-190 (1994). The G protein is deactivated by hydrolysis of GTP by GTPase. U.S. Patent Nos. 5,994,097 and 6,063,596.

[11] GPCR mutations, both of the loss-of-function and of the activating variety, have been associated with numerous human diseases, Coughlin, *supra*. For example, retinitis pigmentosa may arise from either loss-of-function or activating mutations in the rhodopsin gene. Somatic activating mutations in the thyrotropin receptor cause hyperfunctioning thyroid adenomas, Parma, J. et al., Nature 365:649-651 (1993). Parma et al. indicate that it may be possible that certain G protein-coupled receptors susceptible to constitutive activation may behave as proto-oncogenes. Interestingly, GPCRs have functional homologues in human cytomegalovirus and herpesvirus, so GPCRs may have been acquired during evolution for viral pathogenesis, Strader et al., FASEB J., 9:745-754 (1995); Arvanitakis et al., Nature, 385:347-350 (1997); Murphy, Annu. Rev. Immunol. 12:593-633 (1994). The

importance of the GPCR superfamily is further highlighted by the recent discoveries that some of its family members, the chemokine receptors CXCR4/Fusin and CCR5, are co-receptors for T cell-tropic and macrophage-tropic HIV virus strains, respectively, Alkhatib et al., Science, 272:1955 (1996); Choe et al., Cell, 85:1135 (1996); Deng et al., Nature, 381:661 (1996); Doranz et al., Cell, 85:1149 (1996); Dragic et al., Nature, 381:667 (1996); Feng et al., Science, 272:872 (1996). It is conceivable that blocking these receptors may prevent infection by the human immunodeficiency (HIV) virus. Other GPCR-related items include regulating cellular metabolism and diagnosing, treating and preventing particular diseases associated with particular GPCRs.

10 [12] One important way to evaluate GPCRs and antibodies for GPCRs as novel drug targets and for other purposes such as diagnostics is through the creation and use of databases. Such databases can provide large amounts of information about genes, proteins, and other biological matter. An excellent example of such a database is the GPCR database created and maintained by LifeSpan BioSciences, Inc., Seattle, Washington, USA, which  
15 database is available by subscription to researchers and others needing such information. The information in the databases can, for example, be searched, compared, and analyzed. The compilation of such databases, as well as the searching, comparing, etc., of the databases, can be referred to as the field of "bioinformatics." Investigations largely related to genes, such as the information found from the sequencing of the human genome, can be called "genomics"  
20 while similar activities on proteins can be called "proteomics."

[13] There has gone unmet a need for improved systems, compositions, methods, and the like relating to improved antigenicity of peptides from GPCRs and antibodies relating thereto. The present invention provides these and other advantages.

## SUMMARY

25 [14] The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention  
30 provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known

antibodies. The present invention also provides improved methods of selecting antigenic peptides from any desired protein or polypeptide, as well as antigenic peptides so produced and antibodies against such antigenic peptides.

[15] The antigenic peptides and antibodies herein can be used, for example, to detect the presence or absence of corresponding GPCRs. They can be used to diagnose a variety of diseases and disorders in which GPCRs are involved, such as, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

[16] The association of particular GPCRs with particular diseases, disorders or conditions will be apparent to a person of ordinary skill in the art in view of the present application, and thus the association with the antibodies of the present invention to the corresponding diseases, disorders or conditions.

5 [17] Thus, in one aspect the present invention provides isolated antigenic peptides according to any one of SEQ ID NOS. 692-2292. The isolated antigenic peptides also comprise an amino acid sequences that are at least about 90% or 95% identical to such sequences, or be an analog of such sequences, or comprise a short antigenic amino acid sequence that is identical to at least 5 consecutive amino acids set forth in any one of such  
10 sequences or contain no more than one conservative amino acid substitution over at least 7 consecutive amino acids set forth in any of such sequences. The present invention also provides antibodies, particularly isolated antibody having high specificity and high affinity or avidity for a particular GPCR or other target polypeptide or protein, generated using the antigenic peptides discussed herein.

15 [18] The present invention also provides isolated nucleic acid molecules encoding an antigenic peptide or antibody as described herein. The molecule can encode a naturally occurring human antigenic peptide. In some embodiments, the present invention provides processes for producing an isolated polynucleotide can comprise hybridizing a nucleotide encoding an antigenic peptide as discussed herein to DNA such as genomic DNA under  
20 stringent or highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

[19] The present invention also provides kits and assays, such as kits for the detection of antibodies against a particular GPCR or other target polypeptide in a sample comprising: a) an isolated antigenic peptide as discussed herein and derived from the particular GPCR, and  
25 b) at least one of a reagent or a device for detecting the antibodies, or comprising: a) an isolated antibody as described herein, and b) at least one of a reagent or a device for detecting the antibody. The assays include detection of a particular GPCR in a sample, comprising: a) providing an isolated antigenic peptide, b) contacting the isolated antigenic peptide corresponding to the particular GPCR with the sample under conditions suitable and for a  
30 time sufficient for the antigenic peptide to bind to one or more antibodies specific for the target protein present in the sample, to provide an antibody-bound target protein, and c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the

sample contains the particular GPCR. The assays can further comprise the step of binding the isolated antigenic peptide or the antibody to a solid substrate, and the sample can be an unpurified sample, for example from a human being.

[20] The assay can be selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.

[21] In other aspects, the present invention provides methods of identifying an amino acid sequence for an antigenic peptide from a candidate polypeptide sequence such as a polypeptide or protein wherein the antigenic peptide has a length of about 5 to about 100 amino acids, typically 6 amino acids to about 50 amino acids, and preferably 7 amino acids to about 20 amino acids. The methods comprise: a) searching the candidate polypeptide sequence using a comparison window of the length, and b) selecting against amino acid sequences of the length and having at least 1 to 3 or 4 characteristics selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising no charged amino acids. Preferably, the method comprises selecting against at least 5 to all of the characteristics.

[22] The methods can comprise, independently or in addition, selecting against amino acid sequences of the desired length having at least one of the following characteristics 1) sequences having at least 5 consecutive amino acids that are identical to an alternative amino acid sequence from an alternative polypeptide that can be different from the candidate polypeptide, 2) posttranslational modification sites, and 3) highly hydrophobic sequences. The posttranslational modification sites can be phosphorylation or glycosylation sites. The methods can also comprise performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence.

[23] These and other aspects, features, and embodiments are set forth within this application, including the following Detailed Description and attached drawings. The present invention comprises a variety of aspects, features, and embodiments; such multiple aspects,



features, and embodiments can be combined and permuted in any desired manner. In addition, various references are set forth herein, including in the Cross-Reference To Related Applications, that discuss certain compositions, apparatus, methods, or other information; all such references are incorporated herein by reference in their entirety and for all their teachings and disclosures, regardless of where the references may appear in this application.

#### BRIEF DESCRIPTION OF THE DRAWING

[24] Figure 1 depicts representative examples of the nucleotide and amino acid sequences of the GPCRs for which antigenic peptides are set forth herein, SEQ ID NOS. 1 - 691.

10 [25] Figure 2 depicts amino acid sequences for the antigenic peptides for the GPCRs herein, SEQ ID NOS. 692-2292.

[26] Figure 3 depicts a listing of GPCRS for which commercially available antibodies are putatively available.

#### DETAILED DESCRIPTION

##### 15 A. INTRODUCTION AND OVERVIEW

[27] Diseases such as immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases are serious health problems in the modern world. Any improvement in the diagnosis, treatment or other remediation of such diseases is a significant advance for millions of people. The present invention provides methods of identifying and selecting desirable antigenic peptides for GPCRs and other desired target or candidate proteins and polypeptides. The present invention also provides the antigenic peptides themselves, as well as antibodies against the antigenic peptides (and against proteins or polypeptides containing such antigenic peptides), and related diagnostics, antibody-based therapeutics directed to 20 certain diseases and conditions, and other helpful compositions, systems, kits, assays and the like. The compositions, methods, and the like can be useful, for example, as agonists, antagonists, probes, and otherwise as may be desired.

[28] The antigenic peptides have been carefully selected using specific selection criteria and methodologies set forth herein to take advantage of particularly advantageous regions of 30 the GPCRs from which they have been derived to provide unusually specific and

immunogenic antigens. These antigenic peptides are particularly useful for producing highly specific antibodies against the antigenic peptides, which, in turn, also means antibodies that are highly specific for the corresponding GPCRs containing the antigenic peptides. Accordingly, the antigenic peptides of the present invention, and the antibodies produced therefrom, are particularly useful for high specificity, low noise diagnostics and, in the case of the antibodies, for certain antibody-based therapeutics, as well as methods, kits, systems, and the like incorporating or based on such antigenic peptides or antibodies.

[29] The antibodies produced using the antigenic peptides of the present invention, for example, have a specificity for the corresponding GPCR such that the antibodies can selectively detect the corresponding GPCR in a sample containing non-desired or contaminating proteins or polypeptides, such as a tissue or blood sample. Preferably, the antibodies have a high specificity such that no significant amounts of such proteins or polypeptides are detected, and further preferably have a specificity such that only insubstantial to essentially zero amounts of non-desirable proteins are detected.

[30] The antibodies produced using the antigenic peptides of the present invention, for example, typically have an affinity or avidity constant ( $K_a$ ) of at least about  $10^7$  liters/mole, typically a high affinity or avidity at least about  $10^9$  liters/mole, preferably at least about  $10^{10}$  liters/mole, and further preferably at least about  $10^{11}$  liters/mole.

[31] Figure 1 sets forth the DNA and protein sequences for the GPCRs from which the antigenic peptides of the present invention were derived SEQ ID NOS. 1-691. Figure 2 sets forth the amino acid sequences of exemplary antigenic peptides, SEQ ID NOS. 692-2292. The sequences in Figures 1 and 2 are listed according to SEQ ID NO and LSID, which is an identification number assigned to the given sequence in the LifeSpan Biosciences databases. The sequences in Figure 2 also include an identifier LPID, which is also an identification number assigned to the given sequence in the LifeSpan Biosciences databases. Figure 3 depicts GPCRs for which it has been reported that antibodies are commercially available, SEQ ID NOS. 1, 3, 5, 11, 13, 15, 21, 23, 25, 27, 29, 31, 35, 37, 39, 41, 43, 45, 49, 51, 53, 57, 59, 61, 63, 65, 67, 69, 70, 71, 73, 75, 77, 79, 83, 85, 97, 99, 101, 103, 105, 107, 113, 115, 117, 121, 125, 135, 139, 143, 145, 147, 151, 155, 157, 159, 161, 169, 171, 173, 175, 177, 183, 185, 187, 189, 191, 192, 194, 200, 202, 206, 208, 214, 216, 218, 228, 236, 238, 240, 248, 250, 264, 295, 299, 301, 305, 311, 313, 315, 317, 319, 321, 323, 325, 327, 329, 331, 333, 335, 337, 347, 349, 351, 361, 365, 367, 369, 371, 377, 379, 385, 387, 389, 391, 397,

423, 435, 439, 457, 459, 461, 462, 468, 470, 472, 503, 507, 515, 535, 537, 546, 548, 552, 562, 628, 636; Applicants do not represent that any of the antibodies in Figure 3 that such antibodies are actually commercially available nor that they have any significant specificity nor affinity for the GPCRs reported. For GPCRs for which no antigens or antibodies were  
5 previously known, the present invention provides valuable antigenic peptides and antibodies (see, e.g., SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-  
10 1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.); for GPCRs for which antigens or antibodies are known, the present invention provides improved antigens in the form of antigenic peptides and improved antibodies (see, e.g., SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889,  
15 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, which are antigenic peptides derived from GPCRs for which antibodies are reportedly commercially available). The antigenic peptides and antibodies, and uses and assays, etc., related to the antigenic peptides, are discussed further  
20 below.

[32] The discussion herein, including the following passages, has been separated by headings for convenience. The disclosure under a given heading is not restricted to that heading. For example, the discussion in the definitions section is a part of the disclosure of the invention, the discussion on antigenic peptides also contains discussion related to probes  
25 and diagnostics, and the discussion on antibodies contains discussion related to therapeutic compositions, etc.

## B. DEFINITIONS

[33] The following paragraphs provide a non-exhaustive list of definitions of some of the  
30 terms and phrases as used herein. All terms used herein, including those specifically described below in this section, are used in accordance with their ordinary meanings unless the context or definition indicates otherwise. Also unless indicated otherwise, except within

the claims, the use of "or" includes "and" and vice-versa. Non-limiting terms are not to be construed as limiting unless expressly stated (for example, "including" means "including without limitation" unless expressly stated otherwise).

[34] The terms set forth in this application are not to be interpreted in the claims as indicating a "means plus function" relationship unless the word "means" is specifically recited in a claim, and are to be interpreted in the claims as indicating a "means plus function" relationship where the word "means" is specifically recited in a claim. Similarly, the terms set forth in this application are not to be interpreted in method or process claims as indicating a "step plus function" relationship unless the word "step" is specifically recited in the claims, and are to be interpreted in the claims as indicating a "step plus function" relationship where the word "step" is specifically recited in a claim.

[35] "Agonist" indicates a substance, such as a molecule or compound, that interacts with a particular GPCR, for example by binding to the GPCR, to activate, increase, or prolong the amount or the duration of the effect of the biological activity or functionality of the GPCR. Agonists include proteins, nucleic acids, carbohydrates, or any other molecules that bind to and positively modulate the effect of the GPCR. Agonists and other modulators of the particular GPCR can be identified using *in vitro* or *in vivo* assays for G protein-coupled receptor expression or G protein-mediated signaling. For example, assays for agonists and other modulators include expressing a particular GPCR in cells or cell membranes, applying putative modulator compounds in the presence or absence of a specific known or putative ligand and then determining the functional effects on the particular GPCR-mediated signaling. Samples or assays comprising a particular GPCR that are treated with a potential agonist or other modulator are compared to control samples without the agonist or other modulator to examine the extent of modulation. Control samples can be assigned a relative activity value for the particular GPCR of 100%. Agonist activity on a particular GPCR is achieved when the G protein-coupled receptor activity value relative to the control is at least about 110%, optionally about 150%, preferably about 200-500%, or about 1000-3000% or higher. Down-modulation (for example by an antagonist) of a particular GPCR is achieved when the particular GPCR activity value relative to the control is at most about 90%, typically about 80%, optionally about 50% or about 25-0% of the 100% value.

[36] "Aggregate," see Complex.

[37] "Algorithm" refers to a detailed sequence of actions to perform to accomplish some task. In computer programming, refers to instructions given to the computer.

[38] "Allele" or "allelic sequence" indicates an alternative form of the gene encoding the GPCR. Alleles may result from at least one mutation in the nucleic acid sequence and may result in altered mRNAs or in polypeptides whose structure or function may or may not be altered. Any given natural or recombinant gene may have none, one, or many allelic forms. Common mutational changes that give rise to alleles are generally ascribed to natural deletions, additions, or substitutions of nucleotides. Each of these types of changes may occur alone or in combination with the others, one or more times in a given sequence.

[39] "Altered" nucleic acid sequences encoding the GPCR include those sequences with deletions, insertions, or substitutions of different nucleotides, resulting in a polynucleotide encoding the same GPCR or a polypeptide variant with at least one substantial structural or functional characteristic of the GPCR. Included within this definition are polymorphisms that may or may not be readily detectable using a particular oligonucleotide probe against the polynucleotide encoding the GPCR. "Altered" proteins may contain deletions, insertions, or substitutions of amino acid residues that produce a silent change and result in a functionally equivalent GPCR. Deliberate amino acid substitutions may be made on the basis of similarity in polarity, charge, solubility, hydrophobicity, hydrophilicity, or the amphipathic nature of the residues, as long as the biological or immunological activity of the GPCR is retained. For example, negatively charged amino acids may include aspartic acid and glutamic acid, positively charged amino acids may include lysine and arginine, and amino acids with uncharged polar head groups having similar hydrophilicity values may include leucine, isoleucine, and valine; glycine and alanine; asparagine and glutamine; serine and threonine; and phenylalanine and tyrosine.

[40] "Alternative splicing" refers to different ways of cutting and assembling exons to produce mature mRNAs.

[41] "Amino acid" refers generally to any of a class of organic compounds that contains at least one amino group,  $-NH_2$ , and one carboxyl group,  $-COOH$ . The alpha-amino acids,  $RCH(NH_2)COOH$ , are the building blocks from which proteins are typically constructed.

Amino acid can also refer to artificial chemical analogues or mimetics of a given amino acid as described, depending on the context.

[42] "Amino acid sequence" refers to a string of amino acids, such as an oligopeptide, peptide, polypeptide, or protein sequence, or a fragment of any of these, including naturally occurring or synthetic molecules and those comprising an artificial chemical analogue or mimetic of a given amino acid. In this context, "biologically active fragments," "biologically functional fragments," "immunogenic fragments," and "antigenic fragments" refer to fragments of the GPCR that are preferably about 15, 25, or 50 or more amino acids in length and that retain a substantial amount of such activity of the GPCR. Where "amino acid sequence" refers to an amino acid sequence of a naturally occurring protein molecule, "amino acid sequence" and like terms are not necessarily limited to the complete native amino acid sequence associated with the recited protein molecule.

[43] "Amplification" indicates the production of additional copies of something, such as a nucleic acid sequence. Amplification can be generally carried out using polymerase chain reaction (PCR) technologies or other technologies such as the cycling probe reaction (CPR) that are well known in the art. *See, e.g.*, Dieffenbach, C. W. and G. S. Dveksler, PCR Primer, a Laboratory Manual, pp.1-5, Cold Spring Harbor Press, Plainview, N.Y. (1995); U.S. Patents Nos. 5,660,988, 5,731,146 and 6,136,533.

[44] "Amplification primers" are oligonucleotides such as natural, analog or artificially created nucleotides that can serve as the basis for the amplification of a selected nucleic acid sequence. They include, for example, both PCR primers and ligase chain reaction oligonucleotides.

[45] "Analog" or "variant" indicates a GPCR or antigenic peptide that has been modified by deletion, addition, modification, or substitution of one or more amino acid residues compared to the wild-type sequence. Analogs encompass allelic and polymorphic variants, and also muteins and fusion proteins that comprise all or a significant part of such GPCR, *e.g.*, covalently linked via side-chain group or terminal residue to a different protein, polypeptide, or moiety (fusion partner). Variants of a particular GPCR protein refer to an amino acid sequence that is altered by one or more amino acids, for example by one or more amino acid substitution, insertion, deletion or modification, or proteins with or without associated native-pattern glycosylation. The variant may have "conservative" changes. Such "conservative" changes generally are well known in the art and readily determinable for a particular GPCR in view of the present application. Conservative changes include, for example, substitutions where a substituted amino acid has similar structural or chemical

properties to the amino acid it replaced (*e.g.*, negatively charged amino acids include aspartic acid and glutamic acid; positively charged amino acids include lysine, arginine, histidine, asparagine, and glutamine; amino acids containing sulfur include methionine and cysteine; polar hydroxy amino acids include serine, threonine, and tyrosine; large hydrophobic amino acids include phenylalanine and tryptophan; small hydrophobic amino acids include alanine, leucine, isoleucine, and valine). A variant may also have "nonconservative" changes which means that the replacement amino acid provides some substantial change in the amino sequence.

[46] A variant preferably retains at least about 90% identity, and more preferably at least about 95% identity. Within certain embodiments, such variants contain alterations such that the ability of the variant to induce an immunogenic response is not substantially eliminated; in some embodiments the ability to an immunogenic response is not substantially diminished. Modifications of amino acid residues may include but are not limited to aliphatic esters or amides of the carboxyl terminus or of residues containing carboxyl side chains, O-acyl derivatives of hydroxyl group-containing residues, and N-acyl derivatives of the amino-terminal amino acid or amino-group containing residues, *e.g.*, lysine or arginine. Guidance in determining which and how many amino acid residues may be substituted, inserted, deleted or modified without diminishing immunological or biological activity may be found in view of the present application using any of a variety of methods and computer programs known in the art, for example, DNASTAR software. Properties of a variant may generally be evaluated by assaying the reactivity of the variant with, for example, antibodies as described herein or evaluating a biological activity characteristic of the native protein as described herein or as known in the art in view of the present application. Certain polynucleotide variants are capable of hybridizing under appropriately stringent conditions to a naturally occurring DNA sequence encoding a particular GPCR protein (or a complementary sequence). Such hybridizing nucleic acid sequences are also within the scope of this invention.

[47] "Antagonist" refers to a molecule which interacts with a particular GPCR, for example by binding to the particular GPCR, and prevents, inactivates, decreases or shortens the amount or the duration of the effect of the biological activity of the GPCR. Antagonists include proteins, nucleic acids, carbohydrates, antibodies, or any other molecules that so affect the GPCR. Antagonists can be identified, for example, using appropriate screens

corresponding to those described for agonists above and elsewhere herein or as would be apparent to those skilled in the art in view of the present application.

[48] "Antibody" indicates one type of binding partner, typically encoded by an immunoglobulin gene or immunoglobulin genes, and refers to, for example, intact  
5 monoclonal antibodies (including agonist and antagonist antibodies), polyclonal antibodies, phage display antibodies, and multispecific antibodies (*e.g.*, bispecific antibodies) formed, for example, from at least two intact antibodies. Antibody also refers to fragments thereof, which comprise a portion of an intact antibody, generally the antigen-binding or variable region of the intact antibody that are capable of binding the epitopic determinant. Examples  
10 of antibody fragments include Fab, Fab', F(ab')<sub>2</sub>, and Fv fragments, diabodies, linear antibodies, single-chain antibody molecules, and multispecific antibodies formed from antibody fragments. *See* US Patent No. 6,214,984. Antibody fragments may be synthesized by digestion of an intact antibody or synthesized *de novo* either chemically or utilizing recombinant DNA technology. Antibodies according to the present invention have at least  
15 one of adequate specificity, affinity and capacity to perform the activities desired for the antibodies. Antibodies can, for example, be monoclonal, polyclonal, or combinatorial. Antibodies that bind GPCR polypeptides can be prepared using intact polypeptides or using fragments containing small peptides of interest as the immunizing antigen. The polypeptide or oligopeptide used to immunize an animal (*e.g.*, a mouse, a rat, or a rabbit) can be derived  
20 from the translation of RNA, or synthesized chemically, and can be conjugated to a carrier protein if desired. Commonly used carriers that are chemically coupled to peptides include bovine serum albumin, thyroglobulin, and keyhole limpet hemocyanin (KLH). The coupled peptide is then used to immunize the animal.

[49] "Antigenic determinant" refers to the antigen recognition site on an antigen (*i.e.*,  
25 epitope). Such antigenic determinant may also be immunogenic.

[50] "Antisense" refers to any composition containing a nucleic acid sequence that is complementary to a specific nucleic acid sequence. "Antisense strand" refers to a nucleic acid strand that is complementary to the "sense" strand. Antisense molecules may be produced by any method including transcription or synthesis including synthesis by ligating  
30 the gene(s) of interest in a reverse orientation to a desired promoter that permits the synthesis of a complementary strand. Once introduced into a cell, the complementary nucleotides can combine with natural sequences produced by the cell to form duplexes and to block either



transcription or translation. The designation "negative" can refer to the antisense strand, and the designation "positive" can refer to the sense strand.

[51] **"Biologically active"** or **"biologically functional,"** when referring to an antigenic peptide, indicates that the antigenic peptide induces an immunogenic response specific for the antigenic peptide and thus for the GPCR from which it was obtained. A variant, fragment, etc., of an antigenic peptide is "biologically active" or "biologically functional" if the ability to induce the specific immunogenic response is not substantially diminished. The term "not substantially diminished" means retaining a functionality that is at least about 90% of the functionality of the native antigenic peptide. Appropriate assays designed to evaluate such functionality may be designed based on existing assays known in the art in view of the present application, or on the representative assays provided herein.

[52] **"Annotation"** refers to the provision of helpful or identifying information about a GPCR or other open reading frame (ORF), such as locus name, key words, and Medline references.

[53] **"BLAST"** refers to the Basic Local Alignment Search Tool, which is a technique for detecting ungapped sub-sequences that match a given query sequence. BLAST can be used as a preliminary step for detecting ORF boundaries.

[54] **"BLASTP"** refers to a BLAST program that compares an amino acid query sequence against a protein sequence database.

[55] **"BLASTX"** refers to a BLAST program that compares the six-frame conceptual translation products of a nucleotide query sequence (both strands) against a protein sequence database. BLASTX can be used to create a sub-database of ORFs which may exist on a contig, and to identify the best match between one of these ORFs and a sequence in an external database.

[56] **"Buffer"** refers to a component in a solution to provide a buffered solution that resists changes in pH by the action of its acid-base conjugate components.

[57] **"CDS"** refers to the GenBank DNA sequence entry for coding sequence. A coding sequence is a sub-sequence of a DNA sequence that is surmised to encode a gene. A complete gene coding sequence begins with an "ATG" and ends with a stop codon.

[58] **"Clone"** in molecular biology refers to a vector carrying an insert DNA sequence.

[59] **"Cloning"** in molecular biology refers to a recombinant DNA technique used to produce multiple, up to millions or more, copies of a DNA sequence. The DNA sequence is

inserted into a small carrier or vector (*e.g.*, plasmid, bacteriophage, or virus) and inserted into a host cell for amplification or expression.

[60] "Cluster" refers to a group of ORFs related to one another by sequence homology. Clusters are generally determined by a specified degree of homology and overlap (*e.g.*, a stringency).

[61] "Comparison window" indicates a segment of any one of the number of contiguous positions selected from the group consisting of from 20 to 600; usually about 50 to about 200, more usually about 100 to about 150 in which a sequence may be compared to a reference sequence of the same number of contiguous positions after the two sequences are aligned to enhance sequence similarity. Methods of alignment of sequences for comparison will be readily apparent to a person of ordinary skill in the art in view of the present application.

[62] "Complementary" or "complementarity" refers to the natural binding of polynucleotides by base pairing. For example, the sequence "A-G-T" binds to the complementary sequence "T-C-A." Complementarity between two single-stranded molecules may be "partial," such that only some of the nucleic acids bind, or it may be "complete," such that all of the nucleotides of at least one of the single-stranded molecules binds to corresponding nucleotides of the other single-stranded molecule. The degree of complementarity between nucleic acid strands has significant effects on the efficiency and strength of the hybridization between the nucleic acid strands. This can be of particular importance in amplification reactions, which can depend upon binding between nucleic acids strands, and in the design and use of peptide nucleic acid (PNA) molecules.

[63] "Complex," or "aggregate," indicates a dimer or multimer formed between at least two proteins or other macromolecules, for example a GPCR and its ligand.

[64] "Composition" indicates a combination of multiple substances into a mixture.

[65] "Composition comprising a given amino acid sequence" refers broadly to any composition containing the given amino acid sequence. The composition may comprise a dry formulation, an aqueous solution, or a sterile composition.

[66] "Consensus sequence" refers to the sequence that reflects the most common choice of base or amino acid at each position from a series of related DNA, RNA, or protein sequences. Areas of particularly good agreement often represent conserved functional domains. The generation of consensus sequences has typically been subjected to intensive mathematical analysis.

- [67] **"Conservative changes"** to an amino acid sequence, see Analog.
- [68] **"Deletion"** refers to a change in the amino acid or nucleotide sequence that results in the absence of one or more amino acid residues or nucleotides.
- [69] **"Derivative"** refers to chemical modification of an antigenic peptide, or of an antibody specific for and created from the antigenic peptide. A derivative peptide can be modified, for example, by glycosylation or pegylation.
- [70] **"Diabodies"** refers to one type of antibody comprising small antibody fragments with two antigen-binding sites, which fragments comprise a heavy-chain variable domain ( $V_H$ ) connected to a light-chain variable domain ( $V_L$ ) on the same polypeptide chain ( $V_H$ - $V_L$ ). By using a linker that is too short to allow pairing between the two domains on the same chain, the domains pair with the complementary domains of another chain and create two antigen-binding sites. Diabodies are described, for example, in EP 404,097; WO 93/11161; and Holliger et al., Proc. Natl. Acad. Sci. USA, 90:6444-6448 (1993).
- [71] **"Database"** refers to a structured format for organizing and maintaining information or data, a collection of data records, in a computer-readable form that can be rapidly and easily retrieved. A database is typically stored in a computer-readable memory. Records may comprise web pages, graphics, audio files, text files, or links. Records may or may not be further broken into fields. Database records are usually indexed and come with a search interface to find records of interest.
- [72] **"E-value"** refers to a result of a FASTA analysis. The number indicates the probability that a match between two sequences is due to random chance.
- [73] **"Expression vector"** is a specialized vector constructed so that the gene inserted in the vector can be expressed in the cytoplasm of a host cell.
- [74] **"FASTA"** refers to a modular set of sequence comparison programs used to compare an amino acid or DNA sequence against all entries in a sequence database. FASTA was written by Professor William Pearson of the University of Virginia Department of Biochemistry. The program uses the rapid sequence algorithm described by Lipman and Pearson (1988) and the Smith-Waterman sequence alignment protocol. FASTA performs a protein to protein comparison.
- [75] **"FASTX"** refers to a module of the FASTA protocol used to define optimal ORF boundaries while searching for genes. FASTX uses a nucleotide to protein sequence comparison.

[76] "Fragment," see Portion.

[77] "GenBank" refers to a family of public databases comprising nucleic acid and amino acid sequence information, including the GenPept bacterial peptide database.

[78] "Gene" refers to the basic unit of heredity that carries the genetic information for a given RNA or protein molecule. A gene is composed of a contiguous stretch of DNA and contains a coding region that is flanked on each end by regions that are transcribed but not translated. A gene is a segment of DNA involved in producing a biologically active or biologically functional polypeptide chain.

[79] "Heterologous" indicates a nucleic acid that comprises two or more subsequences that are not found in the same relationship to each other in nature. For instance, the nucleic acid is typically recombinantly produced, having two or more sequences from unrelated genes arranged to make a new functional nucleic acid, *e.g.*, a promoter from one source and a coding region from another source. Similarly, a heterologous protein indicates that the protein comprises two or more subsequences that are not found in the same relationship to each other in nature (*e.g.*, a fusion protein).

[80] "Hit Threshold" refers to a pre-set E-value or P-value for evaluating sequence matches. For example, this value can be set at  $1e-6$  for finding genes; and at  $1e-15$  for clustering genes.

[81] "Homology" refers to a degree of complementarity. There may be partial homology or complete homology. The word "identity" may substitute for the word "homology." A partially complementary sequence that at least partially, and substantially, inhibits a corresponding sequence from hybridizing to a target nucleic acid is referred to as "substantially homologous." The inhibition of hybridization of the completely complementary sequence to the target sequence may be examined using a hybridization assay (*e.g.*, Southern or Northern blot, *in situ* hybridization, solution hybridization) under conditions of reduced stringency. A substantially homologous sequence or hybridization probe will compete for and inhibit the binding of a completely homologous sequence to the target sequence under stringency conditions that inhibit non-specific binding but permit specific binding. The absence of non-specific binding may be tested by the use of a second target sequence which lacks even a partial degree of complementarity (*e.g.*, less than about 30% homology or identity). In the absence of non-specific binding, the substantially

homologous sequence or probe will not hybridize to the second, non-complementary target sequence.

[82] **"Humanized antibody"** refers to antibody molecules in which the amino acid sequence in the non-antigen-binding regions has been altered so that the antibody more closely resembles a human antibody, and still retains its original binding ability. Typically, humanized antibodies are human immunoglobulins (recipient antibody) in which residues from a complementarity-determining region (CDR) of the recipient are replaced by residues from a CDR of a non-human species (donor antibody) such as mouse, rat or rabbit having the desired specificity, affinity, and capacity. In some instances, Fv framework residues of the human immunoglobulin are replaced by corresponding non-human residues. Furthermore, humanized antibodies may comprise residues that are found neither in the recipient antibody nor in the imported CDR or framework sequences. These modifications are typically made to further refine and optimize antibody performance. In general, the humanized antibody will comprise substantially all of at least one, and typically two, variable domains, in which all or substantially all of the CDR regions correspond to those of a non-human immunoglobulin and all or substantially all of the framework (FR) regions are those of a human immunoglobulin sequence. The humanized antibody optimally also will comprise at least a portion of an immunoglobulin constant region (Fc), typically that of a human immunoglobulin. For further details see, *e.g.*, Jones et al., *Nature*, 321:522-525 (1986); Reichmann et al., *Nature*, 332:323-329 (1988); and, Presta, *Curr. Op. Struct. Biol.*, 2:593-596 (1992).

[83] **"Identity,"** see Homology.

[84] **"Immunocytochemistry"** refers to the use of immunologic methods, including a specific antibody, to study cell constituents.

[85] **"Immunohistochemistry"** refers to the use of immunologic methods, including a specific antibody, to study specific antigens in tissue slices.

[86] **"Immunolocalization"** refers to the use of immunologic methods, including a specific antibody, to locate molecules or structures within cells or tissues.

[87] **"Immunologically active"** refers to the capability of a natural, recombinant, or synthetic GPCR, or any immunogenic fragment thereof, to induce a specific immune response in appropriate animals or cells and to bind with specific antibodies. A polypeptide is "immunologically active" if it is recognized by (*e.g.*, specifically bound by) a B-cell or T-

cell surface antigen receptor. Immunological activity may generally be assessed using well known techniques, such as those summarized in Paul, Fundamental Immunology, 3rd ed., 243-247, Raven Press (1993) and references cited therein. Such techniques include screening polypeptides derived from the native polypeptide for the ability to react with antigen-specific antisera or T-cell lines or clones, which may be prepared in view of the present application using well known techniques. Preferably, an immunologically active portion of a GPCR protein reacts with such antisera or T-cells at a level that is not substantially lower than the reactivity of the full-length polypeptide (e.g., in an ELISA or T-cell reactivity assay). Such screens may generally be performed using methods well known to those of ordinary skill in the art in view of the present application, such as those described in Harlow and Lane, Antibodies: A Laboratory Manual, Cold Spring Harbor Press (1988). B-cell and T-cell epitopes may also be predicted via computer analysis.

[88] "Immune response" refers to any of the body's immunologic reactions to an antigen such as antibody formation, cellular immunity, hypersensitivity, or immunological tolerance.

[89] "Insertion" and "addition" when referring to a change in a nucleotide or amino sequence indicate the addition of one or more nucleotides or amino acid residues, respectively, to the sequence.

[90] "*In situ* hybridization" refers to use of a nucleic acid probe, typically a DNA or RNA probe, to detect the presence of a DNA or RNA sequence in target cells such as cloned bacterial cells, cultured eukaryotic cells, or tissue samples. *In situ* hybridization can also be used for locating genes on chromosomes. The process can be performed by preparing a microscope slide with cells in metaphase of mitosis, then treating slide with a weak base to denature the DNA. Next, pour radioactively labeled probe onto the slide under hybridizing conditions, expose the slide to a photographic emulsion for a suitable period such as a few days or weeks, then develop the emulsion.

[91] "Isoform" refers to different forms of a protein that may be produced from different genes or from the same gene by alternative RNA splicing.

[92] "Isolated" generally means that the material is removed from its original environment (e.g., the natural environment if it is naturally occurring).

[93] "Library" refers physically to a pool of nucleic acid fragments that has been propagated in a cloning vector. Library can also refer to an electronic collection of genomic

or proteomic sequence data, including raw sequences, contigs, ORFs and loci from a specific organism.

- [94] "Ligand" refers to an ion or molecule that binds with another molecule, such as a GPCR, to form a macromolecule such as a receptor-ligand complex. An "endogenous  
5 ligand" refers to a native ligand that binds to the receptor of the GPCR and modulates biological activity or functionality of the GPCR in its native environment. A "specific ligand" is a ligand able to bind to a particular GPCR and modulate the biological activity or functionality of the particular GPCR; an endogenous ligand is one example of a specific ligand.
- 10 [95] "Microarray" refers to an array of distinct nucleic acid or amino acid molecules arrayed on a substrate, such as paper, nylon or any other type of membrane, filter, chip, glass slide, or any other suitable solid support. Microarrays can also refer to tissue microarrays, composed of small tissue pieces arranged on a slide. U.S. Pat. No. 5,143,854 and PCT Patent Publication Nos. WO 90/15070 and 92/10092.
- 15 [96] "Mimetic" refers to a molecule, *e.g.*, a peptide or non-peptide agent, such as a small molecule, that is able to perform the same biological activity as a certain biologically active agent. For example, some mimetics are molecules comprising the same biological function or activity as the particular GPCR. The structure of the mimetic can be developed from knowledge of the structure of the particular GPCR or portions thereof. For appropriate  
20 mimetics, the mimetic is able to effect some or all of the actions of a given antigenic peptide or antibodies against the antigenic peptide. Such mimetics can be made, in view of the present application, using techniques well known in the art, *see, e.g.*, U.S. Patent Nos. 6,197,752; 6,093,697; 6,207,643; 5,849,323, and can be included in the various processes, methods, and systems, etc., described herein, such as databases, binding partner assays,  
25 probes, medicaments, and therapeutics.
- [97] "Modulate" refers to controllably changing the activity of a substance or other item, such as the biological activity of a GPCR, antigenic peptide or corresponding antibody. For example, modulation may cause an increase or a decrease in protein activity, binding characteristics, or other biological, functional, or immunological properties of the GPCR.
- 30 [98] "Monoclonal antibody" refers to an antibody obtained from a population of substantially homogeneous antibodies, *e.g.*, the individual antibodies comprising the population are identical except for possible naturally occurring mutations that may be present

in minor amounts. Monoclonal antibodies include "chimeric" antibodies (immunoglobulins) in which a portion of the heavy or light chain is identical with or homologous to corresponding sequences in antibodies derived from a particular species or belonging to a particular antibody class or subclass, while the remainder of the chain(s) is identical with or homologous to corresponding sequences in antibodies derived from another species or belonging to another antibody class or subclass, as well as fragments of such antibodies, so long as they exhibit the desired biological activity. U.S. Pat. No. 4,816,567; Morrison et al., P.N.A.S. USA, 81:6851-6855 (1984). Monoclonal antibodies are highly specific, being directed against a single antigenic site. As a matter of distinction, polyclonal antibody preparations typically include different antibodies directed against different determinants (epitopes) of a target antigen whereas each monoclonal antibody is directed against a single determinant on the antigen. Monoclonal antibodies can be synthesized by hybridoma culture, uncontaminated by other immunoglobulins. For example, the monoclonal antibodies to be used in accordance with the present invention may be made by the hybridoma method first described by Kohler and Milstein, Nature, 256:495 (1975), or may be made by recombinant DNA methods. See, e.g., U.S. Pat. No. 4,816,567. Monoclonal antibodies may also be isolated from phage antibody libraries using the techniques described in Clackson et al., Nature, 352:624-628 (1991), and Marks et al., J. Mol. Biol., 222:581-597 (1991), for example. The modifier "monoclonal" indicates the character of the antibody as being obtained from a substantially homogeneous population of antibodies, and is not to be construed as requiring production of the antibody by any particular method.

[99] "Nonconservative" changes to an amino acid sequence, see Analog.

[100] "Northern blotting" or "Northern analysis" refers to a method used to detect specific RNA sequences. For example, the process can be performed by electrophoresing RNA in a denaturing agarose gel, transferring the gel onto a membrane, and hybridizing with a labeled RNA or DNA probe.

[101] "Nucleic acid sequence" refers to a polymer comprising a string of "nucleic acids" such as an oligonucleotide, or a polynucleotide or fragment thereof. The nucleic acid sequence can be from DNA or RNA of genomic or synthetic origin, may be single-stranded or double-stranded, and may represent the sense or the antisense strand. A nucleic acid sequence can also be a PNA or a DNA-like or RNA-like material. Unless stated otherwise,



the term encompasses nucleic acids containing known analogues or mimetics of natural nucleotides that have similar binding properties as the reference nucleic acid.

[102] "Oligonucleotide" refers to a nucleic acid sequence, generally between 6 nucleotides to 60 nucleotides, preferably about 15 to 30 nucleotides, and most preferably about 20 to 25 nucleotides, that can, for example, be used in PCR or other nucleic acid amplification or in a hybridization assay or microarray. "Oligonucleotide" includes "amplimers," "primers," "oligomers," and "probes," as these terms are commonly defined in the art. Oligonucleotides can be chemically synthesized. Such synthetic oligonucleotides may have no 5' phosphate and if so will not ligate to another oligonucleotide without adding a phosphate, typically by using an ATP in the presence of a kinase. A synthetic oligonucleotide will ligate to a fragment that has not been dephosphorylated.

[103] "Operably linked" or "operably connected" indicates that one element of an apparatus, system, or method, etc., is connected to another element of the apparatus, system, or method, etc., such that the two elements are able to perform their intended purposes. For example, when a promoter is linked to a polynucleotide to allow transcription of the polynucleotide, it is "operably linked" to the polynucleotide.

[104] "Orphan receptor" refers to a receptor for which the endogenous ligand or other ligands inducing biological activity are not known.

[105] "PCR" or "polymerase chain reaction" refers to an *in vitro* method that uses oligonucleotide primers, enzymes, and a series of repetitive temperature cycles to generate millions of copies of a nucleic acid, typically DNA, from an original specimen of a specific DNA sequence, which specimen may be present only in a trace amount.

[106] "Plasmids" refers to extrachromosomal genetic elements composed of DNA or RNA found in both eukaryotic and prokaryotic cells that can propagate themselves autonomously in cells. Plasmids can be used as carriers or vectors to clone DNA molecules. They are designated by a lower case p preceded or followed by capital letters or numbers. The starting plasmids herein are either commercially available, publicly available on an unrestricted basis, or can be constructed from available plasmids in accord with published procedures. In addition, equivalent plasmids to those described are known in the art and will be apparent to the ordinarily skilled artisan in view of the present application.

[107] **"Polynucleotide encoding a polypeptide"** indicates a polynucleotide that includes only the coding sequence for the polypeptide as well as polynucleotides that include additional coding or non-coding sequence.

[108] **"Portion" or "fragment"** with regard to a protein (as in "a portion of a given protein") refers to parts of that protein, a subsequence of the complete amino acid sequence of the receptor containing at least about 8, usually at least about 12, more typically at least about 20, and commonly at least about 30 or more contiguous amino acid residues, up to the entire amino acid sequence minus one amino acid. Thus, a protein "comprising at least a portion of the amino acid sequence of SEQ ID NO:XX" or a protein "comprising at least a portion of the amino acid sequence of a particular GPCR" encompasses the full-length protein and fragments thereof. A portion or fragment of a nucleic acid refers to nucleic acid sequences that are greater than about 12 nucleotides in length, and typically at least about 60 or 100 nucleotides, generally at least about 1000 nucleotides, or at least about 10,000 nucleotides in length, up to the entire nucleic acid sequence minus one nucleic acid.

[109] **"P-value"** is a statistical term used to indicate the probability that an event is due to random chance. When used in reference to a result of BLAST searches, the number indicates the probability that a match between two sequences is due to random chance.

[110] **"Receptor"** refers to a molecular structure, typically within a cell or on a cell surface, that selectively binds a specific substance (a ligand) and a specific physiologic effect that accompanies the binding. GPCRs are a type of cell-surface receptor, which means a protein in, on, or traversing the cell membrane (in the case of GPCRs, traversing the cell membrane) that recognizes and binds to specific molecules in the surrounding fluid. The binding to a receptor may serve to transport molecules into the cell's interior or to signal the cell to respond in some way.

[111] **"Recombinant"** refers to both a method of production and a structure. Some recombinant nucleic acids and proteins are made by the use of recombinant DNA techniques that involve human intervention, either in manipulation or selection. Others are made by fusing two fragments that are not naturally contiguous to each other. Engineered vectors are encompassed, as well as nucleic acids comprising sequences derived using any synthetic oligonucleotide process.

[112] **"Sample"** is used in its usual broad sense. For example, a biological sample suspected of containing nucleic acids encoding the GPCR, or fragments thereof, or the GPCR

itself, may comprise a bodily fluid; an extract from a cell, chromosome, organelle, or membrane from a cell; a cell; genomic DNA, RNA, or cDNA (in solution or bound to a solid support); a tissue; a tissue print, and the like. Biological sample refers to samples from a healthy individual as well as to samples from a subject suspected of having or susceptible to

5 having, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal

10 cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma,

15 endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis,

20 rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma),

25 septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or

30 disorder in which a specific GPCR is involved.

**[113]** "Second messengers" refer to intracellular signaling molecules such as cyclic AMP (cAMP), inositol triphosphate, diacylglycerol, or  $\text{Ca}^{2+}$ . Second messengers, in turn, alter the

activity of other intracellular proteins such as cAMP-dependent protein kinase and  $\text{Ca}^{2+}$ /calmodulin-dependent protein kinases, leading to the transduction and amplification of the original extracellular signal.

[114] "Southern blotting" refers to a method for detecting specific DNA sequences via hybridization. For example, a DNA sample can be electrophoresed in a denaturing agarose gel, transferred onto a membrane, and hybridized with a complementary nucleic acid probe. "Southern" when used in reference to a database indicates an electronic analog of the laboratory technique, which analysis can be used to identify libraries in which a given DNA sequence, such as a gene, EST, or ORF is present. The terms "Northern" and "Western" likewise can be used for electronic analogs to the respective laboratory techniques described above.

[115] "Specific binding" or "specifically binding" refers to an interaction between protein or peptide and a certain substance, such as its specific ligand or antibody, and in some cases its agonists or antagonists. The interaction is dependent upon the presence of a particular structure of the protein recognized by the binding molecule (e.g., the antigenic determinant or epitope). For example, if an antibody specifically binds epitope "A," the presence of a polypeptide containing epitope A or the presence of free unlabeled epitope A will reduce the amount of labeled epitope A that binds to the antibody in a reaction containing free labeled epitope A and the antibody. Conversely, the presence of a polypeptide that does not contain epitope A will not reduce the amount of labeled epitope A that binds to the antibody. Highly specific binding indicates that the protein or peptide binds to its particular ligand, antibody, etc., and does not bind in a significant amount to other proteins present in the sample. Typically, a specific or selective reaction will be at least twice the background signal or noise and more typically more than 10 to 100 times the background signal or noise.

[116] "Stringent conditions" refer to conditions that permit hybridization between complementary polynucleotide sequences. Suitably stringent conditions can be defined by, for example, the concentrations of salt or formamide in the prehybridization and hybridization solutions, or by the hybridization temperature. Stringency can be increased by reducing the concentration of salt, increasing the concentration of formamide, or raising the hybridization temperature. Stringent conditions are dependent upon the type of probe as well as the length of the probe and the GC content of the probe. "Stringent conditions" typically

occur within a range from about  $T_m - 5^\circ\text{C}$  ( $5^\circ\text{C}$  below the melting temperature ( $T_m$ ) of the probe) to about  $T_m - 20 - 25^\circ\text{C}$  for a cRNA probe and to about  $T_m - 15^\circ\text{C}$  for an oligonucleotide probe. "**Highly stringent conditions**" refers to conditions under which a probe will hybridize to its target sequence, typically in a complex mixture of nucleic acid sequences, but will not substantially hybridize to other sequences. One example of high stringency conditions for a cRNA probe that is 1,000 nucleotides in length and has a GC content of about 60% is about  $55 - 65^\circ\text{C}$  in 50% formamide, 0.1 X SSC, and 200  $\mu\text{g/ml}$  sheared and denatured salmon sperm DNA. One example of low stringency conditions for the same probe in 50% formamide, 0.1 X SSC, and 200  $\mu\text{g/ml}$  sheared and denatured salmon sperm DNA would be  $30 - 35^\circ\text{C}$ . "**Very highly stringent conditions**" indicates that there must be complete identity between the sequences. The temperature range corresponding to a particular level of stringency can be narrowed further by calculating the purine to pyrimidine ratio of the nucleic acid of interest and adjusting the temperature accordingly. Variations on and modifications of the above ranges and conditions will be readily appreciated by those of skill in the art in view of the present application. As will be understood by those of skill in the art in view of the present application, the stringency of hybridization can be altered to identify or detect identical or related polynucleotide sequences. One guide for nucleic acid hybridization is Tijssen, Laboratory Techniques in Biochemistry and Molecular Biology-v.24 Hybridization with Nucleic Acid Probes, Part I "Overview of principles of hybridization and the strategy of nucleic acid assays" (New York: Elsevier 1993).

[117] "**Substantially purified**" refers to nucleic acid or amino acid sequences that are removed from their natural environment and are separated from other components from such natural environment, and are at least about 60% free, preferably about 75% or 85% free, and most preferably about 90%, 95% or 99% free from such other components with which they are naturally associated. Substantially purified preferably indicates a substantially homogeneous state and can be in either a dry or aqueous solution or other composition as desired. Purity and homogeneity can be assayed by standard methods, for example on a mass or molar basis, using analytical chemistry techniques such as polyacrylamide gel electrophoresis or high performance liquid chromatography.

[118] "Substitution" when referring to a change in a nucleotide or amino sequence indicates the replacement of one or more nucleotides or amino acids by different nucleotides or amino acids, respectively.

[119] "Variant," see Analog.

5 [120] "Western blotting" or "Western analysis" refers to a method for detecting specific protein sequences. For example, the process can be performed by electrophoresing a protein mixture in a denaturing agarose or acrylamide gel, transferring the mixture onto a membrane, and incubating it with an antibody raised against the protein of interest.

[121] Other terms and phrases are defined in other portions of this application.

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### C. SELECTION OF DESIRED ANTIGENIC PEPTIDES FOR GPCRs AND OTHER POLYPEPTIDES

[122] The present invention provides improved antigenic peptides, for example as set forth in Figure 2, SEQ ID NOS. 692-2292, and improved methods of identifying such  
15 antigenic peptides from known or publicly available sequences of polypeptides or proteins, i.e., from a candidate polypeptide sequence. Polypeptide and protein are used in their traditional sense to indicate lengthy amino acid molecules, whereas the antigenic peptide has a length significantly less than the length of the corresponding polypeptide or protein such that the antigenic peptide is capable of providing significantly improved antigenicity relative  
20 to the corresponding polypeptide or protein, typically improved specificity, affinity or avidity. The candidate polypeptide can be, for example, a human protein or polypeptide, a naturally occurring protein or polypeptide or a synthetic or recombinant protein or polypeptide.

[123] The antigenic peptides are typically 5 to about 100 amino acids in length, preferably  
25 6 to about 50 amino acids, and further preferably 7 to about 20 amino acids. The antigenic peptides include short antigenic amino acid sequences (i.e., peptides comprising only a portion of an antigenic sequence as set forth in Figure 2 or as identified using the methods described herein, plus an insignificant number of additional amino acids at one or both ends, where insignificant indicates that the extra amino acids do not substantially interfere with the  
30 antigenicity of the antigenic peptide). Such short antigenic peptides can be identical to at least 5, 6, 7 or more consecutive amino acids of the sequences herein or identified using the methods described herein, or can have one or two (or more, with increasing length)

conservative amino acid substitution for antigenic peptides comprising more than 6 or 7 consecutive amino acids of the sequences herein or identified using the methods described herein. Antigenic peptides and sequences, and related antibodies and assays and the like, are discussed further elsewhere herein with regard to GPCRs, but such discussions applies to all  
5 antigenic peptides produced according to the methods herein, including proteins and polypeptides such as kinases, phosphatases and any other desired protein or polypeptide.

[124] The identification or selection methods comprise searching the candidate polypeptide sequence using a comparison window of the desired length, then selecting against or rejecting amino acid sequences of the length and having at least 1 characteristic  
10 selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising no charged amino acids. Preferably, at least 5, 7, 8, or all of the characteristics are selected.

15 [125] The identification or selection methods can also comprise selecting against amino acid sequences having at least 5 consecutive amino acids that are identical to an alternative amino acid sequence from an alternative polypeptide, i.e., some polypeptide other than the candidate polypeptide from which the selected antigen was derived, that is different from the candidate polypeptide, posttranslational modification sites, or highly hydrophobic sequences,  
20 which indicates sequences adequately hydrophobic to be located in a lipid membrane such as a cellular membrane. The posttranslational modification sites can be phosphorylation or glycosylation sites.

[126] The methods can further comprise performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence. Exemplary BLAST-type and FAST-type  
25 analyses are described above, including BLAST, BLASTP, BLASTX, FASTA, and FASTX.

#### D. GENERAL DISCUSSION OF ANTIGENIC PEPTIDES RELATED TO PARTICULAR GPCRS

##### [127] ANTIGENIC PEPTIDES GENERALLY:

30 [128] The present invention includes antigenic peptides able to induce specific immunogenic responses, and corresponding binding partners. Such antigenic peptides and

binding partners can be cloned, expressed, isolated, purified, and otherwise obtained or manipulated according to routine methods known in the art in view of the present application.

[129] The present invention further relates to antigenic peptides having an amino acid sequence from a particular GPCR, including analogs, mimetics, fragments, derivatives, and the like of such antigenic peptides. See SEQ ID NOS. 1-2292, Figures 1-3. The antigenic peptides may be recombinant, natural or synthetic. The antigenic peptides include (i) antigenic peptides in which one or more of the amino acid residues are substituted with a conserved or non-conserved amino acid residue (preferably a conserved amino acid residue) and such substituted amino acid residue may or may not be one encoded by the genetic code, (ii) antigenic peptides in which one or more of the amino acid residues includes a substituent group, (iii) antigenic peptides in which the mature polypeptide is complexed (e.g., fused or otherwise bonded) with another compound, such as a compound to increase the half-life of the polypeptide (for example, polyethylene glycol), and (iv) antigenic peptides in which additional amino acids are fused to the antigenic peptide. Preparing and using such analogs, etc., are within the scope of those skilled in the art in view of the present application. The antigenic peptides additionally include antigenic peptides that have at least about 90% identity to the given antigenic peptide, and preferably at least about 95% identity to the antigenic peptide. The antigenic peptides additionally include antigenic peptides that contain at least five, six, seven or more consecutive amino acids that are identical to the given antigenic peptide, as well as antigenic peptides that contain at least six, seven, eight or more consecutive amino acids that are identical to the given antigenic except for one or two conservative changes within this such stretch of amino acids. The antigenic peptides of the present invention can be produced by peptide synthesis.

**[130] EXPRESSION PROFILES BASED ON PROTEINS:**

[131] An expression profile of a particular GPCR in one or more tissues can be made using antibodies or other binding partners produced using the antigenic peptides herein, then using traditional approaches such as Western blotting, immunohistochemistry analysis, protein array, ligand-binding studies, radioimmunoassay (RIA), and high performance liquid chromatography (HPLC), and immunohistochemistry analysis. H&E staining and other analyses can be used in combination with such immunologically-based analyses.

**[132] SCREENING FOR ACTIVITY:**



[133] The activity or functionality of an antigenic peptide can be measured using any of a variety of assays known in the art. Similarly, the specificity or affinity of an antibody or other binding partner made using the antigenic peptide can be measured using any of a variety of assays known in the art

5 [134] The activity or functionality of a particular GPCR may be measured using any of a variety of functional assays in which activation of the receptor in question results in an observable change in the level of some second messenger system, including but not limited to adenylyl cyclase, calcium mobilization, arachidonic acid release, ion channel activity, inositol phospholipid hydrolysis, or guanylyl cyclase. Heterologous expression systems utilizing  
10 appropriate host cells to express the nucleic acid of the subject invention are used to obtain the desired second messenger coupling. Receptor activity may also be assayed in an oocyte expression system.

**[135] PROTEIN PURIFICATION:**

[136] The antigenic peptides and proteins or polypeptides containing them can be purified  
15 by standard methods, including but not limited to salt or alcohol precipitation, preparative disc-gel electrophoresis, isoelectric focusing, high pressure liquid chromatography (HPLC), reversed-phase HPLC, gel filtration, cation and anion exchange, partition chromatography, and countercurrent distribution. Suitable purification methods will be readily apparent to those skilled in the art in view of the present application and are disclosed, *e.g.*, in Guide to  
20 Protein Purification, Methods in Enzymology, Vol. 182, M. Deutscher, Ed., Academic Press, New York, NY (1990). Purification steps can be followed as part of carrying out assays for ligand binding activity. Particularly where a particular GPCR is being isolated from a cellular or tissue source, it is preferable to include one or more inhibitors of proteolytic enzymes in the assay system, such as phenylmethylsulfonyl fluoride (PMSF).

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**E. CERTAIN ASSAYS, ANTIBODIES, PROBES, THERAPEUTICS, AND OTHER SYSTEMS AND ASPECTS, OF THE INVENTION**

**1. SYSTEMS AND METHODS FOR SCREENING FOR A PARTICULAR GPCR OR ANTIGENIC PEPTIDE**

30 **[137] SCREENING FOR ANTIGENIC PEPTIDES:**

[138] As noted elsewhere herein, the present invention provides antigenic peptides and antibodies that are specific for a particular GPCR. The invention also provides systems and

methods for using or detecting such peptides, and antibodies against such peptides or corresponding GPCRs in a sample. The assays are based on the detection of the antigenic peptides, typically as they are displayed by the particular GPCR, or the detection of antibodies produced against the particular antigenic peptides and corresponding GPCRs.

5   **[139]   SCREENING FOR/WITH ANTIGENIC PEPTIDES:**

**[140]**   Many assays are characterized by the ability of antigenic peptides for a particular GPCR to be bound by antibodies against them, and the ability of antibodies produced against such antigenic peptides to bind to antigens or epitopes of the particular GPCR in a sample. Some exemplary assays are described below and elsewhere herein.

10   **[141]   LIST OF ASSAYS:**

**[142]**   A variety of assays can detect antibodies that bind specifically to the desired protein in or from a sample, or detect a desired protein bound to one or more antibodies in or from the sample. Exemplary assays are described in detail in *Antibodies: A Laboratory Manual*, Harlow and Lane (eds.), Cold Spring Harbor Laboratory Press (1988). Representative  
15   examples of such assays include: countercurrent immuno-electrophoresis (CIEP), radioimmunoassays, radioimmunoprecipitations, enzyme-linked immunosorbent assays (ELISA), dot blot assays, inhibition or competition assays, sandwich assays, immunostick (dip-stick) assays, simultaneous assays, immunochromatographic assays, immunofiltration assays, latex bead agglutination assays, immunofluorescent assays, biosensor assays, and  
20   low-light detection assays. *See* U.S. Pat. Nos. 4,376,110 and 4,486,530; WO 94/25597; WO/25598.

**[143]           ENZYME-LINKED IMMUNOSORBENT ASSAYS (ELISA):**

**[144]**   One assay for the detection of a particular GPCR is a sandwich assay such as an enzyme-linked immunosorbent assay (ELISA). In one preferred embodiment, the ELISA  
25   comprises the following steps: (1) coating the particular GPCR antigenic peptide onto a solid phase, (2) incubating a sample suspected of containing anti-particular GPCR antibodies with the antigenic peptide coated onto the solid phase under conditions that allow the formation of an antigen-antibody complex, (3) adding an anti-antibody (such as anti-IgG) conjugated with a label to be captured by the resulting antigen-antibody complex bound to the solid phase,  
30   and (4) measuring the captured label and determining therefrom whether the sample contains anti-particular GPCR antibodies.

**[145]           IMMUNOFLUORESCENCE ASSAY:**

[146] A fluorescent antibody test (FA-test) uses a fluorescently labeled antibody able to bind to one of the proteins of the invention. For detection, visual determinations are made by a technician using fluorescence microscopy, yielding a qualitative result. In one embodiment, this assay is used for the examination of tissue samples or histological sections.

5 [147] **BEAD AGGLUTINATION ASSAYS:**

[148] In latex bead agglutination assays, antibodies to one or more of the antigenic peptides of the present invention are conjugated to latex beads. The antibodies conjugated to the latex beads are then contacted with a sample under conditions permitting the antibodies to bind to desired proteins in the sample, if any. The results are then read visually, yielding a  
10 qualitative result. In some embodiments, as with certain other assays, this format can be used in the field for on-site testing.

[149] **ENZYME IMMUNOASSAYS:**

[150] Enzyme immunoassays (EIA) include a number of different assays that can use the antibodies described in the present application. For example, a heterogeneous indirect EIA  
15 uses a solid phase coupled with an antibody of the invention and an affinity purified, anti-IgG immunoglobulin preparation. The solid phase can be a polystyrene microtiter plate. The antibodies and immunoglobulin preparation are then contacted with the sample under conditions permitting antibody binding, which conditions are well known in the art. The results of such an assay can be read visually or using a device such as a spectrophotometer,  
20 such as an ELISA plate reader, to yield a quantitative result. An alternative solid phase EIA format includes plastic-coated ferrous metal beads able to be moved during the procedures of the assay by means of a magnet. Yet another alternative is a low-light detection immunoassay format. In this highly sensitive format, the light emission produced by appropriately labeled bound antibodies are quantified automatically. Preferably, the reaction  
25 is performed using microtiter plates.

[151] In an alternative embodiment, a radioactive tracer is substituted for the enzyme-mediated detection in an EIA to produce a radioimmunoassay (RIA).

[152] **SANDWICH ASSAY:**

[153] In a capture-antibody sandwich enzyme assay, the desired protein is bound between  
30 an antibody attached to a solid phase, preferably a polystyrene microtiter plate, and a labeled antibody. The results can be measured, for example, using a spectrophotometer, such as an ELISA plate reader.

**[154] SEQUENTIAL AND SIMULTANEOUS ASSAYS:**

**[155]** In a sequential assay format, reagents are allowed to incubate with the capture antibody in a stepwise fashion. The test sample is first incubated with the capture antibody. Following a wash step, incubation with the labeled antibody occurs. In a simultaneous assay, the two incubation periods described in the sequential assay are combined. This eliminates one incubation period plus a wash step.

**[156] IMMUNOSTICK (DIP-STICK) ASSAYS:**

**[157]** A dipstick/immunostick format is essentially an immunoassay using a polystyrene paddle or dipstick instead of a polystyrene microtiter plate as the solid phase. Reagents are the same and the format can either be simultaneous or sequential.

**[158] IMMUNOCHROMATOGRAPHIC ASSAYS:**

**[159]** In a chromatographic strip test format, a capture antibody and a labeled antibody are dried onto a chromatographic strip, which typically comprises nitrocellulose or high porosity nylon bonded to cellulose acetate. The capture antibody is usually spray dried as a line at one end of the strip. At this end, there is an absorbent material that is in contact with the strip. At the other end of the strip, the labeled antibody is deposited in a manner that prevents it from being absorbed onto the membrane. Usually, the label attached to the antibody is a latex bead or colloidal gold. The assay may be initiated by applying the sample immediately in front of the labeled antibody.

**[160] IMMUNOFILTRATION ASSAYS:**

**[161]** Immunofiltration/immunoconcentration formats combine a large solid-phase surface with directional flow of sample/reagents, which concentrates and accelerates the binding of antigen to antibody. In an exemplary format, the test sample is preincubated with a labeled antibody, and then applied to a solid phase such as fiber filters, nitrocellulose membranes, or the like. The solid phase can also be precoated with latex or glass beads coated with capture antibody. Detection of analyte is the same as that in a standard immunoassay. The flow of sample/reagents can be modulated by either vacuum or the wicking action of an underlying absorbent material.

**[162] BIOSENSOR ASSAYS:**

**[163]** A threshold biosensor assay is a sensitive, instrumented assay amenable to screening large numbers of samples at low cost. In one embodiment, such an assay comprises the use of light-addressable potentiometric sensors wherein the reaction involves

the detection of a pH change due to binding of the desired protein by capture antibodies, bridging antibodies, and urease-conjugated antibodies. Upon binding, a pH change is effected that is measurable by translation into electrical potential ( $\mu$ volts). The assay typically occurs in a very small reaction volume, and is very sensitive; the reported detection  
5 limit of the assay is 1,000 molecules of urease per minute.

## 2. ANTIBODIES

### **[164] ANTIBODIES GENERATED AGAINST A PARTICULAR ANTIGENIC PEPTIDE AND ITS CORRESPONDING GPCR:**

10 **[165]** Highly specific, high affinity or antibodies against a particular GPCR or other polypeptide can be generated using the antigenic peptides herein and using antibody generation techniques as described herein or elsewhere. The antibodies produced using the antigenic peptides of the present invention, for example, have a specificity for the corresponding GPCR such that the antibodies can selectively detect the corresponding GPCR  
15 in a sample containing non-desired or contaminating proteins or polypeptides, such as a tissue or blood sample. Preferably, the antibodies have a high specificity such that no significant amounts of such proteins or polypeptides are detected, and further preferably have a specificity such that only insubstantial to essentially zero amounts of non-desirable proteins are detected. The antibodies produced using the antigenic peptides of the present invention,  
20 for example, typically have an affinity or avidity constant ( $K_a$ ) of at least about  $10^7$  liters/mole, typically a high affinity or avidity at least about  $10^9$  liters/mole, preferably at least about  $10^{10}$  liters/mole, and further preferably at least about  $10^{11}$  liters/mole.

**[166]** The antibodies can be used to conduct immunohistochemistry and other analyses of a variety of tissue samples to determine expression of a particular GPCR in such tissues, for  
25 diagnostic assays, and for other desired purposes. The specification will now discuss a variety of antibody types, methods, uses, etc.

### **[167] ANTIBODIES GENERALLY:**

**[168]** In some embodiments, the present invention provides antibodies and other binding partners created using the antigenic peptides herein and directed to a particular GPCR from  
30 which the antigenic peptides were derived. Compositions and uses for such antibodies are contemplated, including diagnostic, medicament, and therapeutic uses. Various diagnostic, medicament, and therapeutic uses for antibodies have been reviewed above and, for example,

in Goldenberg et al., *Semin. Cancer Biol.*, 1(3):217-225 (1990); Beck et al., *Semin. Cancer Biol.*, 1(3):181-188 (1990); Niman, *Immunol. Ser.*, 53:189-204 (1990); Endo, *Nippon Igaku Hoshasen Gakkai Zasshi (Japan)*, 50(8):901-909 (1990); and, U.S. Pat. No. 6,214,984.

[169] Recognized immunoglobulin genes include the kappa, lambda, alpha, gamma, delta, epsilon, and mu constant region genes, as well as myriad immunoglobulin variable region genes. Light chains are classified as either kappa or lambda. Heavy chains are classified as gamma, mu, alpha, delta, or epsilon, which in turn define the immunoglobulin classes, IgG, IgM, IgA, IgD, and IgE, respectively. An exemplary immunoglobulin (antibody) structural unit comprises a tetramer. Each tetramer is composed of two identical pairs of antigenic peptide chains, each pair having one "light" chain (about 25 kD) and one "heavy" chain (about 50-70 kD). The N-terminus of each chain defines a variable region of about 100 to 110 or more amino acids primarily responsible for antigen recognition. The terms variable light chain ( $V_L$ ) and variable heavy chain ( $V_H$ ) refer to these light and heavy chains respectively.

15 [170] **ANTI-IDIOTYPIC ANTIBODIES:**

[171] The present invention encompasses anti-idiotypic antibodies, including polyclonal and monoclonal anti-idiotypic antibodies, that are produced using the antibodies described herein as antigens. These anti-idiotypic antibodies are useful because they may mimic the structures of the antigenic peptides set forth herein.

20 [172] Techniques for producing antibodies, including antibody fragments, include the following.

a. Antibody Preparation

(i) Polyclonal Antibodies

25 [173] **ANTIBODY PREP - POLYCLONAL:**

[174] Polyclonal antibodies are generally raised in animals by multiple subcutaneous (sc) or intraperitoneal (ip) injections of the relevant antigen and an adjuvant. It may be useful to conjugate the relevant antigen to a protein that is immunogenic in the species to be immunized, e.g., keyhole limpet hemocyanin, serum albumin, bovine thyroglobulin, or soybean trypsin inhibitor, using a bifunctional or derivatizing agent, for example, maleimidobenzoyl sulfosuccinimide ester (conjugation through cysteine residues), N-

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hydroxysuccinimide (through lysine residues), glutaraldehyde, succinic anhydride,  $\text{SOCl}_2$ , or  $\text{R}^1\text{N}=\text{C}=\text{NR}$ , where R and  $\text{R}^1$  are different alkyl groups.

**[175] ANTIBODY PREP – ADJUVANTS (ALL ABS):**

[176] Suitable adjuvants for the vaccination of animals for the production of polyclonal, monoclonal, and other antibodies include but are not limited to Adjuvant 65 (containing peanut oil, mannide monooleate, and aluminum monostearate); Freund's complete or incomplete adjuvant; mineral gels such as aluminum hydroxide, aluminum phosphate, and alum; surfactants such as hexadecylamine, octadecylamine, lysolecithin, dimethyldioctadecylammonium bromide, N,N-dioctadecyl-N',N'-bis(2-hydroxymethyl) propanediamine, methoxyhexadecylglycerol, and pluronic polyols; polyanions such as pyran, dextran sulfate, poly IC, polyacrylic acid, and carbopol; peptides such as muramyl dipeptide, dimethylglycine, tuftsin, stress proteins, core-containing proteins from a positive stranded RNA virus, *see* US Pat. No. 6,153,378; and, oil emulsions. The antigenic peptides could also be administered following incorporation into liposomes or other microcarriers.

[177] Information concerning adjuvants and various aspects of immunoassays are disclosed, *e.g.*, in the series by P. Tijssen, Practice and Theory of Enzyme Immunoassays, 3rd Edition (1987), Elsevier, New York. Other useful references covering methods for preparing polyclonal antisera include Microbiology, Hoeber Medical Division, Harper and Row (1969); Landsteiner, Specificity of Serological Reactions, Dover Publications, New York (1962); and, Williams, et al., Methods in Immunology and Immunochemistry, Vol. 1, Academic Press, New York (1967).

[178] Animals can be immunized against the antigen, immunogenic conjugates, or derivatives by combining 1 mg or 1  $\mu\text{g}$  of the peptide or conjugate (for rabbits or mice, respectively) with 3 volumes of Freund's complete adjuvant and injecting the solution intradermally at multiple sites. One month later the animals are boosted with 1/5 to 1/10 the original amount of peptide or conjugate in Freund's complete adjuvant by subcutaneous injection at multiple sites. Seven to 14 days later the animals are bled and the serum is assayed for antibody titer. Animals are boosted until the titer plateaus. Preferably, the animal is boosted with the conjugate of the same antigen, but conjugated to a different protein or through a different cross-linking reagent. Conjugates also can be made in recombinant cell culture as protein fusions. In addition, aggregating agents such as alum can be suitably used to enhance the immune response.

## (ii) Monoclonal Antibodies

**[179] ANTIBODY PREP - MONOCLONAL:**

**[180]** Monoclonal antibodies are obtained from a population of substantially homogeneous antibodies, *e.g.*, the individual antibodies comprising the population are identical except for possible naturally occurring mutations that may be present in minor amounts. For example, monoclonal antibodies can be made using the hybridoma method first described by Kohler and Milstein, *Nature*, 256:495 (1975), or can be made by recombinant DNA methods, or otherwise as desired.

**[181]** In the hybridoma method, a mouse, or other appropriate host animal, such as a hamster, is immunized as described herein to elicit lymphocytes that produce or are capable of producing antibodies that will bind specifically to the antigenic peptide used for immunization. Alternatively, lymphocytes may be immunized *in vitro*. Lymphocytes then are fused with myeloma cells using a suitable fusing agent, such as polyethylene glycol, to form a hybridoma cell, Goding, *Monoclonal Antibodies: Principles and Practice*, pp. 59-103, Academic Press (1986).

**[182]** The hybridoma cells thus prepared are seeded and grown in a suitable culture medium that preferably contains one or more substances that inhibit the growth or survival of the unfused, parental myeloma cells. For example, if the parental myeloma cells lack the enzyme hypoxanthine guanine phosphoribosyl transferase (HGPRT or HPRT), the culture medium for the hybridomas typically will include hypoxanthine, aminopterin, and thymidine (HAT medium), which substances prevent the growth of HGPRT-deficient cells.

**[183]** Preferred myeloma cells are those that fuse efficiently, support stable high-level production of antibody by the selected antibody-producing cells, and are sensitive to a medium such as HAT medium, for example murine myeloma lines, such as those derived from MOPC-21 and MPC-11 mouse tumors available from the Salk Institute Cell Distribution Center, San Diego, CA USA, and SP-2 cells available from the American Type Culture Collection, Rockville, MD USA. Human myeloma and mouse-human heteromyeloma cell lines have also been described for the production of human monoclonal antibodies, Kozbor, *J. Immunol.*, 133:3001 (1984); Brodeur et al., *Monoclonal Antibody Production Techniques and Applications*, pp. 51-63, Marcel Dekker, Inc., New York (1987).



[184] Culture medium in which hybridoma cells are growing is assayed for production of monoclonal antibodies directed against the antigenic peptide. The binding specificity of monoclonal antibodies produced by hybridoma cells can be determined by immunoprecipitation or by an *in vitro* binding assay, such as radioimmunoassay (RIA) or enzyme-linked immunosorbent assay (ELISA). The binding affinity of the monoclonal antibody can, for example, be determined by the Scatchard analysis of Munson and Pollard, Anal. Biochem., 107:220 (1980). The antibodies produced using the antigenic peptides of the present invention, for example, typically have an affinity or avidity constant ( $K_a$ ) of at least about  $10^7$  liters/mole, typically a high affinity or avidity at least about  $10^9$  liters/mole, preferably at least about  $10^{10}$  liters/mole, and further preferably at least about  $10^{11}$  liters/mole.

[185] After hybridoma cells are identified that produce antibodies of the desired specificity, affinity, or activity, the clones may be subcloned by limiting dilution procedures and grown by standard methods (Goding, *supra*). Suitable culture media for this purpose include, for example, D-MEM or RPMI-1640 medium. In addition, the hybridoma cells may be grown *in vivo* as ascites tumors in an animal.

[186] The monoclonal antibodies secreted by the subclones are suitably separated from the culture medium, ascites fluid, or serum by conventional immunoglobulin purification procedures such as, for example, protein A-SEPHAROSE<sup>TM</sup>, hydroxyapatite chromatography, gel electrophoresis, dialysis, or affinity chromatography.

[187] DNA encoding the monoclonal antibodies can be readily isolated and sequenced using conventional procedures (*e.g.*, by using oligonucleotide probes that are capable of binding specifically to genes encoding the heavy and light chains of murine antibodies). The hybridoma cells serve as a preferred source of such DNA. Once isolated, the DNA may be placed into expression vectors, which can then be transfected into host cells such as *E. coli* cells, simian COS cells, Chinese hamster ovary (CHO) cells, or myeloma cells that do not otherwise produce immunoglobulin protein, to obtain the synthesis of monoclonal antibodies in the recombinant host cells. Review articles on recombinant expression in bacteria of DNA encoding antibody include Skerra et al., Curr. Opinion in Immunol., 5:256-262 (1993), and Pluckthun, Immunol. Revs., 130:151-188 (1992).

[188] **MOABS - COMBINATORIAL:**

[189] In a further embodiment, antibodies or antibody fragments can be isolated from antibody phage libraries generated using the techniques described in McCafferty et al.,

Nature, 348:552-554 (1990), using the proper antigen such as CD11a, CD18, IgE, or HER-2 to select for a suitable antibody or antibody fragment. Clackson et al., Nature, 352:624-628 (1991) and Marks et al., J. Mol. Biol., 222:581-597 (1991) describe the isolation of murine and human antibodies, respectively, using phage libraries. Subsequent publications describe the production of high affinity (nM range) human antibodies by chain shuffling, Marks et al.,  
5 Biotechnology, 10:779-783 (1992), as well as combinatorial infection and *in vivo* recombination as strategies for constructing very large phage libraries, Waterhouse et al., Nuc. Acids. Res., 21:2265-2266 (1993). Combinatorial antibodies are also discussed in Huse et al., Science 246:1275-1281 (1989), and Sastry et al., Proc. Natl. Acad. Sci. USA, 86:5728-  
10 5732 (1989), and Alting-Mees et al., Strategies in Molecular Biology 3:1-9 (1990). These references describe a system commercially available from Stratacyte, La Jolla, CA USA. Briefly, mRNA is isolated from a B cell population and utilized to create heavy and light chain immunoglobulin cDNA expression libraries in the  $\lambda$ IMMUNOZAP(H) and  $\lambda$ IMMUNOZAP(L) vectors. These vectors may be screened individually or co-expressed to  
15 form Fab fragments or antibodies, *see* Huse et al., *supra*; *see also* Sastry et al., *supra*. Positive plaques can subsequently be converted to a non-lytic plasmid, which allows for high-level expression of monoclonal antibody fragments from *E. coli*.

**[190] HUMANIZED MOAB:**

**[191]** Binding partners can also be constructed utilizing recombinant DNA techniques to  
20 incorporate the variable regions of a gene that encode a specifically binding antibody. The construction of these binding partners can be readily accomplished by one of ordinary skill in the art in view of the present application. *See* Larrick et al., Biotechnology, 7:934-938 (1989); Riechmann et al., Nature, 332:323-327 (1988); Roberts et al., Nature, 328:731-734 (1987); Verhoeyen et al., Science 239:1534-1536 (1988); Chaudhary et al., Nature, 339:394-  
25 397 (1989); *see also* U.S. Pat. No. 5,132,405 entitled "Biosynthetic Antibody Binding Sites".) For example, the DNA can be modified by substituting the coding sequence for human heavy- and light-chain constant domains in place of homologous murine sequences, U.S. Pat. No. 4,816,567; Morrison, et al., Proc. Nat. Acad. Sci., 81:6851 (1984), or by covalently joining to the immunoglobulin coding sequence all or part of the coding sequence for a non-  
30 immunoglobulin polypeptide. In another example, DNA segments encoding the desired antigen-binding domains specific for the protein or peptide of interest are amplified from appropriate hybridomas and inserted directly into the genome of a cell that produces human

antibodies. *See* Verhoeyen et al., *supra*; *see also* Reichmann et al., *supra*. Some of these techniques transfer the antigen-binding site of a specifically binding mouse or rat monoclonal antibody or the like to a human antibody. Such antibodies can be preferable for therapeutic use in humans because they are typically not as antigenic as rat or mouse antibodies.

- 5 [192] In an alternative embodiment, genes that encode the variable region from a hybridoma producing a monoclonal antibody of interest can be amplified using oligonucleotide primers for the variable region. These primers may be synthesized by one of ordinary skill in the art, or may be purchased from commercially available sources. For instance, primers for mouse and human variable regions including, among others, primers for
- 10  $V_{H\alpha}$ ,  $V_{H\beta}$ ,  $V_{H\gamma}$ ,  $V_{H\delta}$ ,  $C_{H1}$ ,  $V_L$ , and  $C_L$  regions are available from Stratacyte (La Jolla, CA). These primers may be utilized to amplify heavy- or light-chain variable regions, which may then be inserted into vectors such as IMMUNOZAP<sup>TM</sup>(H) or IMMUNOZAP<sup>TM</sup>(L) (Stratacyte), respectively. These vectors may then be introduced into *E. coli* for expression. Utilizing these techniques, large amounts of a single-chain protein containing a fusion of the
- 15  $V_H$  and  $V_L$  domains may be produced, *see* Bird et al., Science 242:423-426 (1988).

**[193] ANTIBODY SUBSTITUTIONS - NON-IMMUNOGLOBULIN POLYPEPTIDES (ALL ABS):**

- [194] Non-immunoglobulin polypeptides can be substituted in monoclonal and other antibodies described herein for the constant domains of an antibody, or they can be
- 20 substituted for the variable domains of one antigen-combining site of an antibody to create a chimeric bivalent antibody comprising one antigen-combining site having specificity for an antigen and another antigen-combining site having specificity for a different antigen.

**[195] CHIMERICS:**

- [196] Chimeric or hybrid antibodies can also be prepared *in vitro* using known methods in
- 25 synthetic protein chemistry, including those involving crosslinking agents, in view of the present application. For example, immunotoxins may be constructed using a disulfide-exchange reaction or by forming a thioether bond. Examples of suitable reagents for this purpose include iminothiolate and methyl-4-mercaptobutyrimidate.

**[197] ANTIBODY LABELING (ALL ABS):**

- 30 [198] For diagnostic applications or otherwise as desired, and for monoclonal and other antibodies described herein, the antibodies and other binding partners typically will be labeled with a detectable moiety. The detectable moiety can be any moiety that is capable of

producing, either directly or indirectly, a detectable signal. For example, the detectable moiety may be a radioisotope, such as  $^3\text{H}$ ,  $^{14}\text{C}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ , or  $^{125}\text{I}$ ; a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin; or an enzyme, such as alkaline phosphatase, beta-galactosidase, or horseradish peroxidase. Any method known in the art for conjugating the antibody or binding partner to the detectable moiety may be employed, including those methods described by Hunter et al., *Nature*, 144:945 (1962); David et al., *Biochemistry*, 13:1014 (1974); Pain et al., *J. Immunol. Meth.*, 40:219 (1981); and Nygren, J. *Histochem. Cytochem.*, 30:407 (1982).

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### (iii) Humanized And Human Antibodies

#### [199] HUMANIZED AB GENERALLY:

[200] Methods for humanizing non-human antibodies are well known in the art and have been discussed in part above. Generally, a humanized antibody has one or more amino acid residues introduced into it from a source which is non-human. These non-human amino acid residues are often referred to as "import" residues, which are typically taken from an "import" variable domain. Humanization can be performed essentially following the method of Winter and co-workers, Jones et al., *Nature*, 321:522-525 (1986); Riechmann et al., *Nature*, 332:323-327 (1988); Verhoeyen et al., *Science*, 239:1534-1536 (1988), by substituting rodent CDRs or CDR sequences for the corresponding sequences of a human antibody. Accordingly, such humanized antibodies are chimeric antibodies, U.S. Pat. No. 4,816,567, wherein substantially less than an intact human variable domain has been substituted by the corresponding sequence from a non-human species. In practice, humanized antibodies are typically human antibodies in which some CDR residues and possibly some FR residues are substituted by residues from analogous sites in rodent antibodies.

[201] The choice of human variable domains, both light and heavy, to be used in making humanized antibodies is very important to reduce antigenicity. According to the so-called "best-fit" method, the sequence of the variable domain of a rodent antibody is screened against the entire library of known human variable-domain sequences. The human sequence that is closest to that of the rodent is then accepted as the human framework (FR) for the humanized antibody. Sims et al., *J. Immunol.*, 151:2296 (1993); Chothia and Lesk, *J. Mol. Biol.*, 196:901 (1987). Another method uses a particular framework derived from the consensus sequence of all human antibodies of a particular subgroup of light or heavy chains.

The same framework may be used for several different humanized antibodies. Carter et al., Proc. Natl. Acad. Sci. USA, 89:4285 (1992); Presta et al., J. Immunol., 151:2623 (1993).

[202] It is typically desirable that antibodies be humanized with retention of high affinity for the antigen and other favorable biological properties. To achieve this goal, according to one method, humanized antibodies are prepared by a process of analysis of the parental sequences and various conceptual humanized products using three-dimensional models of the parental and humanized sequences. Three-dimensional immunoglobulin models are commonly available and are familiar to those skilled in the art. Computer programs are available that illustrate and display probable three-dimensional conformational structures of selected candidate immunoglobulin sequences. Inspection of these displays permits analysis of the likely role of the residues in the functioning of the candidate immunoglobulin sequence, *e.g.*, the analysis of residues that influence the ability of the candidate immunoglobulin to bind antigen. In this way, FR residues can be selected and combined from the consensus and import sequences so that the desired antibody characteristic, such as increased affinity for the target antigen(s), is achieved. In general, CDR residues are directly and most substantially involved in influencing antigen binding.

[203] It is also possible to produce transgenic animals (*e.g.*, mice) that are capable, upon immunization, of producing a full repertoire of human antibodies in the absence of endogenous immunoglobulin production. For example, it has been described that the homozygous deletion of the antibody heavy-chain joining region (J<sub>H</sub>) gene in chimeric and germ-line mutant mice results in complete inhibition of endogenous antibody production. Transfer of the human germ-line immunoglobulin gene array in such germ-line mutant mice will result in the production of human antibodies upon antigen challenge. *See, e.g.*, Jakobovits et al., Proc. Natl. Acad. Sci. USA. 90:2551-255 (1993); Jakobovits et al., Nature, 362:255-258 (1993); Bruggemann et al., Year Immuno., 7:33 (1993). Human antibodies can also be produced in phage-display libraries, Hoogenboom and Winter, J. Mol. Biol., 227:381 (1991); Marks et al., J. Mol. Biol., 222:581 (1991).

#### (iv) Antibody Fragments

[204] **ANTIBODY FRAGMENTS:**

[205] Various techniques have been developed for the production of antibody fragments. Such fragments can be derived via proteolytic digestion of intact antibodies, *see, e.g.*,

Morimoto et al., J. Biochem. Biophys. Meth. 24:107-117 (1992) and Brennan et al., Science, 229:81 (1985). Fragments can also be produced directly by recombinant host cells. For example, antibody fragments can be isolated from antibody phage libraries discussed above. Fab'-SH fragments can be directly recovered from *E. coli* and chemically coupled to form  
5 F(ab')<sub>2</sub> fragments, Carter et al., Biotechnology 10:163-167 (1992). F(ab')<sub>2</sub> fragments can be isolated directly from recombinant host cell culture. Other techniques for the production of antibody fragments will be apparent to the skilled practitioner.

#### (v) Bispecific Antibodies

##### 10 [206] **BISPECIFIC ANTIBODIES GENERALLY:**

[207] Bispecific antibodies (BsAbs) are antibodies that have binding specificities for at least two different antigens. Bispecific antibodies can be derived from full-length antibodies or from antibody fragments, *e.g.*, F(ab')<sub>2</sub> bispecific antibodies.

[208] Methods for making bispecific antibodies are known in the art. Traditional  
15 production of full-length bispecific antibodies is based on the coexpression of two immunoglobulin heavy chain-light chain pairs, where the two chains have different specificities, Millstein and Cuello, Nature, 305:537-539 (1983). Because of the random assortment of immunoglobulin heavy and light chains, these hybridomas (quadromas) produce a mixture of potentially 10 different antibody molecules, of which only one has the  
20 correct bispecific structure. Purification of the correct molecule, which is usually accomplished by affinity chromatography steps, is rather cumbersome, and the product yields are low. Similar procedures are disclosed in WO 93/08829, and in Traunecker et al., E.M.B.O. J., 10:3655-3659 (1991).

[209] According to another approach, antibody variable domains containing the desired  
25 binding specificities (antibody-antigen combining sites) are fused to immunoglobulin constant domain sequences. The fusion is preferably with an immunoglobulin heavy chain constant domain, comprising at least part of the hinge, C<sub>H</sub> 2, and C<sub>H</sub> 3 regions. It is preferred to have the first heavy-chain constant region (C<sub>H</sub> 1) containing the site necessary for light chain binding, present in at least one of the fusions. DNAs encoding the immunoglobulin  
30 heavy chain fusions and, if desired, the immunoglobulin light chain, are inserted into separate expression vectors, and are co-transfected into a suitable host organism. This provides for great flexibility in adjusting the mutual proportions of the three polypeptide fragments in

embodiments when unequal ratios of the three polypeptide chains used in the construction provide the improved yields. It is, however, possible to insert the coding sequences for two or all three polypeptide chains in one expression vector when the expression of at least two polypeptide chains in equal ratios results in high yields or when the ratios are of no particular  
5 significance.

**[210] ANTIBODIES - HYBRID IMMUNOGLOBULIN HEAVY CHAIN:**

**[211]** In one embodiment of this approach, the bispecific antibodies are composed of a hybrid immunoglobulin heavy chain with a first binding specificity in one arm, and a hybrid immunoglobulin heavy chain-light chain pair (providing a second binding specificity) in the  
10 other arm. This asymmetric structure may facilitate the separation of the desired bispecific compound from unwanted immunoglobulin chain combinations, as the presence of an immunoglobulin light chain in only one half of the bispecific molecule provides for a facile method of separation. This approach is discussed in WO 94/04690. For further details of generating bispecific antibodies see, for example, Suresh et al., Meth. Enzymol., 121:210  
15 (1986).

**[212] ANTIBODIES - CROSS-LINKED OR "HETEROCONJUGATE":**

**[213]** Bispecific antibodies include cross-linked or "heteroconjugate" antibodies. For example, one of the antibodies in the heteroconjugate can be coupled to avidin, the other to biotin. Such antibodies have, for example, been proposed to target immune system cells to  
20 unwanted cells, U.S. Pat. No. 4,676,980), and for treatment of HIV infection, WO 91/00360, WO 92/200373, and EP 03089). Heteroconjugate antibodies may be made using any convenient cross-linking methods. Suitable cross-linking agents are well known in the art, and are disclosed in U.S. Pat. No. 4,676,980, along with a number of cross-linking techniques.

**[214] ANTIBODIES - DIABODIES:**

**[215]** The "diabody" technology described by Hollinger et al., Proc. Natl. Acad. Sci. USA, 90:6444-6448 (1993) has provided an alternative mechanism for making BsAb fragments. The fragments comprise a heavy-chain variable domain ( $V_H$ ) connected to a light-chain variable domain ( $V_L$ ) by a linker that is too short to allow pairing between the two domains  
30 on the same chain. Accordingly, the  $V_H$  and  $V_L$  domains of one fragment are forced to pair with the complementary  $V_L$  and  $V_H$  domains of another fragment, thereby forming two antigen-binding sites.

[216] Another strategy for making BsAb fragments by the use of single-chain Fv (sFv) dimers has also been reported. See Gruber et al., J. Immunol., 152:5368 (1994). These researchers designed an antibody comprising the V<sub>H</sub> and V<sub>L</sub> domains of a first antibody joined by a 25-amino-acid-residue linker to the V<sub>H</sub> and V<sub>L</sub> domains of a second antibody.

5 The refolded molecule bound to fluorescein and the T-cell receptor and redirected the lysis of human tumor cells that had fluorescein covalently linked to their surface.

[217] **ANTIBODIES - OTHER:**

[218] Techniques for generating bispecific antibodies from antibody fragments have also been described in the literature. For example, bispecific antibodies can be prepared using  
10 chemical linkage. Brennan et al., Science, 229:81 (1985) describe a procedure wherein intact antibodies are proteolytically cleaved to generate F(ab')<sub>2</sub> fragments. These fragments are reduced in the presence of the dithiol complexing agent sodium arsenite to stabilize vicinal dithiols and prevent intermolecular disulfide formation. The Fab' fragments generated are then converted to thionitrobenzoate (TNB) derivatives. One of the Fab'-TNB derivatives is  
15 then reconverted to the Fab'-thiol by reduction with mercaptoethylamine and is mixed with an equimolar amount of the other Fab'-TNB derivative to form the BsAb. The BsAbs produced can be used as agents for the selective immobilization of enzymes.

[219] Fab'-SH fragments can be directly recovered from *E. coli*, which can be chemically coupled to form bispecific antibodies. Shalaby et al., J. Exp. Med., 175:217-225 (1992)  
20 describe the production of a fully humanized BsAb F(ab')<sub>2</sub> molecule. Each Fab' fragment was separately secreted from *E. coli* and subjected to directed chemical coupling *in vitro* to form the BsAb. The BsAb thus formed was able to bind to cells overexpressing the HER2 receptor and normal human T cells, as well as trigger the lytic activity of human cytotoxic lymphocytes against human breast tumor targets. See also Rodriguez et al., Int. J. Cancers  
25 (Suppl.) 7:45-50 (1992).

[220] Various techniques for making and isolating BsAb fragments directly from recombinant cell culture have also been described. For example, bispecific F(ab')<sub>2</sub> heterodimers have been produced using leucine zippers. Kostelny et al., J. Immunol., 148(5):1547-1553 (1992). The leucine zipper peptides from the Fos and Jun proteins are  
30 linked to the Fab' portions of two different antibodies by gene fusion. The antibody homodimers are reduced at the hinge region to form monomers and then re-oxidized to form the antibody heterodimers.



b. Antibody Purification

**[221] ANTIBODY PURIFICATION GENERALLY:**

**[222]** When using recombinant techniques, the antibody can be produced intracellularly, in the periplasmic space, or directly secreted into the medium. If the antibody is produced intracellularly, as a first step, the particulate debris, either host cells or lysed fragments, is removed, for example, by centrifugation or ultrafiltration. Carter et al., Bio/Technology 10:163-167 (1992), describe a procedure for isolating antibodies which are secreted to the periplasmic space of *E. coli*. Briefly, cell paste is thawed in the presence of sodium acetate (pH 3.5), EDTA, and phenylmethylsulfonylfluoride (PMSF) over about 30 min. Cell debris can be removed by centrifugation. Where the antibody is secreted into the medium, supernatants from such expression systems are generally first concentrated using a commercially available protein concentration filter, for example, an Amicon or Millipore Pellicon ultrafiltration unit. A protease inhibitor such as PMSF may be included in any of the foregoing steps to inhibit proteolysis and antibiotics may be included to prevent the growth of adventitious contaminants.

**[223] BEFORE LPHIC:**

**[224]** The antibody composition prepared from the cells is preferably subjected to at least one purification step prior to LPHIC. Examples of suitable purification steps include hydroxyapatite chromatography, gel electrophoresis, dialysis, and affinity chromatography. The suitability of protein A as an affinity ligand depends on the species and isotype of any immunoglobulin Fc domain that is present in the antibody. Protein A can be used to purify antibodies that are based on human  $\gamma 1$ ,  $\gamma 2$ , or  $\gamma 4$  heavy chains, Lindmark et al., J. Immunol. Meth. 62:1-13 (1983). Protein G has been recommended for mouse isotypes and for human  $\gamma 3$ , Guss et al., E.M.B.O. J., 5:1567-1575 (1986). The matrix to which the affinity ligand is attached is often agarose, but other matrices are available. Mechanically stable matrices such as controlled pore glass or poly(styrenedivinyl)benzene allow for faster flow rates and shorter processing times than can be achieved with agarose. Where the antibody comprises a  $C_H 3$  domain, the Bakerbond ABX<sup>TM</sup> resin (J. T. Baker, Phillipsburg, N.J.) is useful for purification. Other techniques for protein purification such as fractionation on an ion-exchange column, ethanol precipitation, Reverse Phase HPLC, chromatography on silica, chromatography on heparin SEPHAROSE<sup>TM</sup>, chromatography on an anion or cation

exchange resin (such as a polyaspartic acid column), chromatofocusing, SDS-PAGE, and ammonium sulfate precipitation are also available depending on the antibody to be recovered.

**[225] LPHIC:**

**[226]** Following any preliminary purification step(s), the mixture comprising the antibody of interest and contaminant(s) can be subjected to LPHIC. *See* US Patent No. 6,214,984. Often, the antibody composition to be purified will be present in a buffer from the previous purification step. However, it may be necessary to add a buffer to the antibody composition prior to the LPHIC step. Many buffers are available and can be selected by routine experimentation. The pH of the mixture comprising the antibody to be purified and at least one contaminant in a loading buffer is adjusted to a pH of about 2.5-4.5 using either an acid or base, depending on the starting pH. The loading buffer can have a low salt concentration (*e.g.*, less than about 0.25 M salt).

**[227]** The mixture is loaded on the HIC column. HIC columns normally comprise a base matrix (*e.g.*, cross-linked agarose or synthetic copolymer material) to which hydrophobic ligands (*e.g.*, alkyl or aryl groups) are coupled. One example of an HIC column comprises an agarose resin substituted with phenyl groups (*e.g.*, a Phenyl SEPHAROSE™ column). Many HIC columns are available commercially. Examples include, but are not limited to, Phenyl SEPHAROSE 6 FAST FLOW™ column with low or high substitution (Pharmacia LKB Biotechnology, AB, Sweden); Phenyl SEPHAROSE™ High Performance column (Pharmacia LKB Biotechnology, AB, Sweden); Octyl SEPHAROSE™ High Performance column (Pharmacia LKB Biotechnology, AB, Sweden); FRACTOGEL™ EMD Propyl or FRACTOGEL™ EMD Phenyl columns (E. Merck, Germany); MACRO-PREP™ Methyl or MACRO-PREP™ t-Butyl Supports (Bio-Rad, California); WP HI-Propyl (C<sub>3</sub>)™ column (J. T. Baker, New Jersey); and TOYOPEARL™ ether, phenyl, or butyl columns (TosoHaas, PA).

**[228]** The antibody is typically eluted from the column using an elution buffer that is the same as the loading buffer. The elution buffer can be selected using routine experimentation in view of the present application. The pH of the elution buffer may be between about 2.5-4.5 and have a low salt concentration (*e.g.*, less than about 0.25 M salt). It may not be necessary to use a salt gradient to elute the antibody of interest; the desired product may be recovered in the flow-through fraction that does not bind significantly to the column.

[229] The LPHIC step provides a way to remove a correctly folded and disulfide bonded antibody from unwanted contaminants (*e.g.*, incorrectly associated light and heavy fragments). The method can provide an approach to substantially remove an impurity characterized as a correctly folded antibody fragment whose light and heavy chains fail to associate through disulfide bonding. Antibody compositions prepared using LPHIC can be up to about 95% pure or more. Purities of more than about 98% have been reported. US Patent No. 6,214,984.

[230] **POST LPHIC:**

[231] Antibody compositions prepared by LPHIC can be further purified as desired using techniques which are well known in the art. Diagnostic or therapeutic formulations of the purified protein can be made by providing the antibody composition in a physiologically acceptable carrier, examples of which are provided below. To remove contaminants (*e.g.*, unfolded antibody and incorrectly associated light and heavy fragments) from the HIC column so that it can be re-used, a composition including urea (*e.g.*, 6.0 M urea, 1% MES buffer pH 6.0, 4 mM ammonium sulfate) can be flowed through the column.

c. Some Uses For Antibodies Described Herein

(i) Generally

[232] **GENERALLY:**

[233] The present invention comprises any suitable use for the antibodies and other binding partners discussed herein. The following provides some of the desired uses, including diagnostic and therapeutic uses. Various diagnostic and therapeutic uses for antibodies have been reviewed in Goldenberg et al., *Semin. Cancer Biol.*, 1(3):217-225 (1990); Beck et al., *Semin. Cancer Biol.*, 1(3):181-188 (1990); Niman, *Immunol. Ser.* 53:189-204 (1990); and, Endo, *Nippon Igaku Hoshasen Gakkai Zasshi (Japan)* 50(8):901-909 (1990), for example.

[234] **ASSAYS:**

[235] The antibodies can be used in immunoassays, such as enzyme immunoassays. BsAbs can be useful for this type of assay; one arm of the BsAb can be designed to bind to a specific epitope on the enzyme so that binding does not cause enzyme inhibition, the other arm of the antibody can be designed to bind to an immobilizing matrix ensuring a high enzyme density at the desired site. Examples of such diagnostic BsAbs include those having

specificity for IgG as well as ferritin, and those having binding specificities for horseradish peroxidase (HRP) as well as a hormone, for example. Monoclonal and polyclonal antibodies are also exemplary antibodies for immunoassays.

[236] The antibodies can be designed for use in two-site immunoassays. For example, 5 two antibodies are produced binding to two separate epitopes on the analyte protein; one antibody binds the complex to an insoluble matrix, the other binds an indicator enzyme.

[237] **DIAGNOSTIC USES:**

[238] Antibodies can also be used for immunodiagnosis, *in vitro* or *in vivo* or otherwise, of various diseases or conditions based on the presence or absence of a particular GPCR. 10 Such diseases and conditions include, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, 15 osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne 20 muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocyoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, 25 Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, 30 chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and

cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

- 5 [239] To facilitate this diagnostic use, an antibody that binds a particular GPCR, when such is differentially expressed in tumors or other target diseases, can be conjugated with a detectable marker (*e.g.*, a chelator that binds a radionuclide). Examples of tumor-associated antigens being used in a similar fashion include an antibody having specificity for the tumor-associated antigen CEA used for imaging colorectal and thyroid carcinomas and the anti-  
10 p185<sup>HER2</sup> antibody used for detecting cancers characterized by amplification of the HER2 protooncogene. Other uses for the antibodies of the present invention will be apparent to the skilled practitioner in view of the present application.

#### (ii) Assays

##### 15 [240] ASSAYS:

[241] For certain applications such as some diagnostic and other assay applications, the antibody typically can be labeled directly or indirectly with a detectable moiety. The detectable moiety can be any moiety that is capable of producing, either directly or indirectly, a detectable signal. For example, the detectable moiety may be a radioisotope, such as <sup>3</sup>H,  
20 <sup>14</sup>C, <sup>32</sup>P, <sup>35</sup>S, or <sup>125</sup>I; a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin; or an enzyme, such as alkaline phosphatase, beta-galactosidase, or HRP.

[242] Any method known in the art for separately conjugating the antibody to the detectable moiety may be employed, including those methods described by Hunter et al.,  
25 Nature, 144:945 (1962); David et al., Biochemistry, 13:1014 (1974); Pain et al., J. Immunol. Meth. 40:219 (1981); and, Nygren, J. Histochem. and Cytochem. 30:407 (1982).

[243] The antibodies of the present invention may be employed in any desired assay method, such as competitive binding assays, direct, and indirect sandwich assays, and immunoprecipitation assays. Zola, Monoclonal Antibodies: A Manual of Techniques, pp.  
30 147-158 (CRC Press, Inc. (1987).

##### [244] COMPETITIVE BINDING ASSAYS:

[245] Competitive binding assays rely on the ability of a labeled standard to compete with the test sample analyte for binding with a limited amount of antibody. The amount of analyte in the test sample is inversely proportional to the amount of standard that becomes bound to the antibody. To facilitate determining the amount of standard that becomes bound, the antibody generally is insolubilized before or after the competition, so that the standard, and analyte that are bound to the antibody may conveniently be separated from the standard, and analyte which remain unbound.

[246] BsAbs are particularly useful for sandwich assays which involve the use of two molecules, each capable of binding to a different immunogenic portion, or epitope, of the sample to be detected. In a sandwich assay, the test sample analyte is bound by a first arm of the antibody which is immobilized on a solid support, and thereafter a second arm of the antibody binds to the analyte, thus forming an insoluble three part complex. *See, e.g.*, U.S. Pat. No. 4,376,110. The second arm of the antibody may itself be labeled with a detectable moiety (direct sandwich assays) or may be measured using an anti-immunoglobulin antibody that is labeled with a detectable moiety (indirect sandwich assay). For example, one type of sandwich assay is an ELISA assay, in which case the detectable moiety is an enzyme. Assays are discussed further elsewhere herein in relation to binding partners such as antibodies, and antigenic peptides for particular GPCRs, including assays searching for or using such antigenic peptides, and would be apparent to those skilled in the art in view of the present application.

### (iii) Affinity Purification

#### [247] AFFINITY PURIFICATION:

[248] The antibodies also are useful for the affinity purification of an antigen of interest such as a particular GPCR from sources such as recombinant cell culture or natural sources.

### (iv) Therapeutics

#### [249] THERAPEUTIC USES:

[250] Therapeutic compositions, and uses, etc., for the antibodies described herein will now be discussed. As with other parts of this application, this section does not contain the entire discussion of therapeutic uses or compositions, etc., for antibodies; other sections discuss both antibodies, and therapeutics, and the discussion in this section applies to certain

other aspects discussed herein. Turning to antibodies and therapeutics, the antibodies can be used, for example, for redirected cytotoxicity (*e.g.*, to kill tumor cells), as a vaccine adjuvant, for delivering thrombolytic agents to clots, for delivering immunotoxins to tumor cells, for converting enzyme activated prodrugs at a target site (*e.g.*, a tumor), for treating infectious  
5 diseases or targeting immune complexes to cell surface receptors.

**[251] THERAPEUTIC FORMULATIONS:**

**[252]** Therapeutic formulations of the antibody can be prepared for storage by mixing the antibody having the desired degree of purity with optional physiologically acceptable carriers, excipients, or stabilizers (Remington's Pharmaceutical Sciences, 16th edition, Osol,  
10 A., Ed. (1980), for example in the form of lyophilized cake or aqueous solutions. Acceptable carriers, excipients, or stabilizers are nontoxic to recipients at the dosages, and concentrations employed, and include buffers such as phosphate, citrate, and other organic acids; antioxidants including ascorbic acid; low molecular weight (less than about 10 residues) polypeptides; proteins, such as serum albumin, gelatin, or immunoglobulins; hydrophilic  
15 polymers such as polyvinylpyrrolidone; amino acids such as glycine, glutamine, asparagine, arginine, or lysine; monosaccharides, disaccharides, and other carbohydrates including glucose, mannose, or dextrans; chelating agents such as EDTA; sugar alcohols such as mannitol or sorbitol; salt-forming counterions such as sodium; or nonionic surfactants such as Tween, Pluronic, or polyethylene glycol (PEG).

**[253]** The antibodies also may be entrapped in microcapsules prepared, for example, by coacervation techniques or by interfacial polymerization (for example, hydroxymethylcellulose or gelatin-microcapsules, and poly-[methylmethacrylate] microcapsules, respectively), in colloidal drug delivery systems (for example, liposomes, albumin microspheres, microemulsions, nano-particles, and nanocapsules), or in  
25 macroemulsions. Such techniques are disclosed in Remington's Pharmaceutical Sciences, *supra*.

**[254] THERAPEUTIC FORMULATIONS -STERILE:**

**[255]** An antibody to be used for *in vivo* human administration should be sterile. This can be accomplished by filtration through sterile filtration membranes, for example prior to or  
30 following lyophilization and reconstitution. The antibody ordinarily will be stored in lyophilized form or in solution. Therapeutic antibody compositions generally are placed into

a container having a sterile access port, for example, an intravenous solution bag or vial having a stopper pierceable by a hypodermic injection needle.

**[256] THERAPEUTIC ADMINISTRATIONS:**

**[257]** The route of antibody administration is in accord with known methods, *e.g.*,  
5 injection or infusion by intravenous, intraperitoneal, intracerebral, intramuscular, intraocular, intraarterial, or intralesional routes, or by sustained release systems as noted below.

**[258]** The antibody can be administered, for example, continuously by infusion or by bolus injection. Suitable examples of sustained-release preparations include semipermeable matrices of solid hydrophobic polymers containing the protein, which matrices are in the  
10 form of shaped articles, *e.g.*, films, or microcapsules. Examples of sustained-release matrices include polyesters, hydrogels (*e.g.*, poly(2-hydroxyethyl-methacrylate) as described by Langer et al., J. Biomed. Mater. Res., 15:167-277 (1981), and Langer, Chem. Tech., 12:98-105 (1982), or poly(vinylalcohol)), polylactides, U.S. Pat. No. 3,773,919; EP 58,481, copolymers of L-glutamic acid and gamma ethyl-L-glutamate, Sidman et al., Biopolymers,  
15 22:547-556 (1983), non-degradable ethylene-vinyl acetate, Langer et al., *supra*, degradable lactic acid-glycolic acid copolymers such as the LUPRON DEPOT™ (injectable microspheres composed of lactic acid-glycolic acid copolymer and leuprolide acetate), and poly-D-(-)-3-hydroxybutyric acid, EP 133,988.

**[259] THERAPEUTIC ADMINISTRATIONS - SUSTAINED RELEASE-POLYMERS:**  
20

**[260]** While polymers such as ethylene-vinyl acetate and lactic acid-glycolic acid sustain release of molecules for over 100 days, certain hydrogels release proteins for shorter time periods. When encapsulated antibodies remain in the body for a long time, they may denature or aggregate as a result of exposure to moisture at 37°C, resulting in a loss of  
25 biological activity and possible changes in immunogenicity. Rational strategies can be devised for antibody stabilization depending on the mechanism involved. For example, if the aggregation mechanism is discovered to be intermolecular S-S bond formation through thio-disulfide interchange, stabilization may be achieved by modifying sulfhydryl residues, lyophilizing from acidic solutions, controlling moisture content, using appropriate additives,  
30 and developing specific polymer matrix compositions.

**[261] THERAPEUTIC ADMINISTRATIONS - SUSTAINED RELEASE-LIPOSOMES:**



[262] Sustained-release antibody compositions also include liposomally entrapped antibody. Liposomes containing the antibody can be prepared by methods such as those in DE 3,218,121; Epstein et al., Proc. Natl. Acad. Sci. USA, 82:3688-3692 (1985); Hwang et al., Proc. Natl. Acad. Sci. USA, 77:4030-4034 (1980); EP 52,322; EP 36,676; EP 88,046; EP 5 143,949; EP 142,641; Japanese patent application 83-118008; U.S. Pat. Nos. 4,485,045 and 4,544,545; and EP 102,324. Ordinarily the liposomes are of the small (about 200-800 Angstroms) unilamellar type in which the lipid content is greater than about 30 mol. % cholesterol, the selected proportion being adjusted for the optimal antibody therapy.

[263] **THERAPEUTICALLY EFFECTIVE AMOUNT:**

10 [264] An effective amount of antibody to be employed therapeutically will depend, for example, upon the therapeutic objectives, the route of administration, and the condition of the patient. Accordingly, it will be necessary for the therapist to titer the dosage and modify the route of administration as required to obtain the optimal therapeutic effect. A typical daily dosage might range from about 1 µg/kg to up to 10 mg/kg or more, depending on the factors 15 mentioned above. Typically, the clinician will administer antibody until a dosage is reached that achieves the desired effect. The progress of this therapy is easily monitored by conventional assays.

5. DRUG DESIGN BASED ON THE ANTIGENS HEREIN OR  
20 ANTIBODIES THERETO

[265] **DISEASE/CONDITIONS LIST:**

[266] The peptides and antibodies of the present invention can serve as valuable tools for designing drugs for treating various pathophysiological conditions such as immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological- 25 related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (e.g., osteoarthritis, osteoporosis), carcinoma (e.g., basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung 30 small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne

muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved or that would be readily apparent to those skilled in the art in view of the present application.

## EXAMPLES

[267] The Examples below provide information as follows: Example 1 relates to the identification and selection of the antigens set forth in Figure 2. Examples 2 to 4 relate to antibody production and purification based on such antigens. Examples 5 to 10 relate to H&E staining. And, Example 11 relates to Western blot analyses.

### EXAMPLE 1: SELECTION OF ANTIGENS

[268] Antigenic peptides were derived from the amino acid sequence of a particular GPCR based on analyses of likely antigen-containing regions and specificity of those regions for the protein/gene of interest. The specificity of the antigen peptides (approximately 20 amino acids in length) for antibody generation was determined using the outlined techniques, including BLAST of several public databases. These public databases included but were not limited to GenBank, Swiss Prot Human, Swiss Prot NonHuman, GenPeptH, GenPept M, and

LifeSpan's proprietary databases. With respect to specificity, parameters that precluded the use of a particular peptide included the presence of 6 or more contiguous amino acids with sequence identity to protein(s) other than the protein of interest, the presence of sites of posttranslational modification, including phosphorylation and glycosylation, and highly hydrophobic sequences, which could indicate potential *in situ* localization within the plasma membrane. The peptides were analyzed for antigenicity using the published algorithm of Hopp, T. P., and Woods, K. R, Proc. Natl. Acad. Sci. U.S.A. 78, 3824-3828, (1981). Additional considerations in antigenic peptide design included 1) selection against sequences with multiple prolines in a row, 2) selection against sequences with multiple serines in a row, 3) selection against sequences with multiple lysines in a row, 4) selection against sequences with multiple arginines in a row 5) selection against sequences with multiple aspartic acids in a row, 6) selection against sequences with multiple glutamic acids in a row, 7) selection against peptides containing methionine or tryptophan, which can become oxidized as a result of the cyclization reaction, and 8) avoidance of stretches of 5 or more amino acids having no uncharged amino acids (which also resulted in a desirable charge to peptide length ratio of at least 1 charge:5 residues). The selected antigenic peptides are set forth in the Sequence Listing and in Figure 2.

#### EXAMPLE 2: ANTIBODY PRODUCTION SCHEDULE

- [269] Day 0 - Pre-immune serum collection (approximately 5.0 ml). Immunize using 200 µg antigen peptide per rabbit in Complete Freund's Adjuvant.
- [270] Day 14 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [271] Day 28 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [272] Day 42 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [273] Day 49 - First production bleed; obtain 24.0 - 26.0 ml.
- [274] Day 56 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [275] Day 63 - Second production bleed and ELISA analysis.

[276] Day 70 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.

[277] Day 77 - Third production bleed and affinity purification.

5                   **EXAMPLE 3: IMMUNOSORBENT PURIFICATION OF ANTISERUM:  
COUPLING OF PEPTIDE TO CNBR-ACTIVATED SEPHAROSE 4B**

[278] Weigh out 0.8 g of CNBr-activated Sepharose 4B (2.5 ml of final gel volume). Wash and re-swell on sintered glass filter with 1 mM HCl, followed by coupling buffer (0.1 M NaHCO<sub>3</sub>, 0.25 M NaCl, pH 8.5). Dissolve 10 mg of protein or peptide in coupling buffer.  
10 Mix protein solution with gel suspension and incubate 2 hours at room temperature or overnight at 4°C. Block remaining active groups with 0.2 M glycine buffer, pH 8.1. Wash away excess adsorbed protein with coupling buffer, followed by 0.1 M acetate buffer containing 0.5 M NaCl, pH 4.3. Equilibrate the column with phosphate-buffered saline (PBS), pH 7.7.

15                   **EXAMPLE 4: IMMUNOSORBENT PURIFICATION OF ANTISERUM:  
AFFINITY PURIFICATION OF ANTISERUM**

[279] Dilute 10 ml of clear antiserum 1:1 with PBS, pH 7.7, apply to affinity column at a flow rate of 0.3 ml/minute, and monitor absorbance of eluate at 280 nm. Collect fractions of  
20 unbound material and rinse column with PBS, pH 7.7. Elute bound antibody with 0.2 M glycine, pH 1.85, and collect eluate until absorbance at 280 nm returns to baseline. Neutralize all collected fractions with 1 M Tris-HCl, pH 8.5 immediately after collection. Determine OD at 280 nm, and determine the total OD recovered. Conduct ELISA analysis  
25 and the removal of all antibody from the original serum. Concentrate antibody to approximately 2.0 mg/ml and dialyze against PBS with 0.01% NaN<sub>3</sub>.

**EXAMPLE 5: PREPARATION OF ANTIBODY DILUTIONS**

[280] The purpose of this protocol is to dilute antibodies in solution. Materials include  
30 Tris-HCL Buffer with carrier protein and 0.015 M NaN<sub>3</sub> (Dako Antibody Diluent #S0809 (DAKO, Carpinteria, CA); vials containing the antibodies described above or commercial antibodies against the particular GPCR; pipetmen and disposable tips; container of chopped ice; 12 ml Dako reagent tubes; and, reagent tube rack.

- [281] The procedure is a) calculate proportions of antibody and diluent according to desired concentrations and volume requirements; b) label reagent tubes and place in rack; c) pipette needed volume of diluent into tube(s); d) place vials of antibodies into ice; e) invert and/or flick antibody vial(s) 3 or 4 times to insure suspension; f) pipette required volume of antibody(s) into corresponding diluent volumes; and, g) mix gently.

#### EXAMPLE 6: PREPARATION OF AUTOSTAINER SOLUTIONS

- [282] The purpose of this protocol is the preparation of concentrated solutions for use in a DAKO autostainer. Materials include DAKO<sup>®</sup> TBST (Tris Buffered Saline Containing Tween-S3306), 10X Concentrate, DAKO<sup>®</sup> Target Retrieval Solution, 10x Concentrate (S1699), deionized H<sub>2</sub>O, 20L container, with lid, marked at the 10L level, DAKO<sup>®</sup> TBS (Tris Buffered Saline-S1968), and DAKO Tween<sup>®</sup> (S1966).

- [283] The procedure to make TBST 10x Concentrate is a) pour 2 500 ml bottles DAKO<sup>®</sup> TBST into a 20 L container, b) add deionized H<sub>2</sub>O until solution level is at 10 L mark, c) replace lid and shake 10 to 20 times, d) pour diluted DAKO<sup>®</sup> TBST into autostainer carboy(s) as designated. The procedure to make Target Retrieval Solution is a) measure 135 ml of deionized H<sub>2</sub>O and pour into slide bath, b) measure 15 ml of DAKO<sup>®</sup> Target Retrieval solution, c) add to H<sub>2</sub>O, and d) agitate. This solution is then used in the steam method of target retrieval, Example 9, below. The procedure to make TBS is a) fill 20L container to 10L mark with deionized H<sub>2</sub>O, b) add 2 envelopes of DAKO<sup>®</sup> TBS, c) add 5 ml of DAKO TWEEN<sup>®</sup>, and d) replace lid and agitate 10 to 20 times.

#### EXAMPLE 7: PREPARATION OF SOLUTIONS FOR ANTIBODY DETECTION

- [284] Solutions for antibody detection are prepared using Vector<sup>®</sup> Biotinylated antibody (BA series), Vectastain<sup>®</sup> ABC-AP Kit (AK-5000), 10 mM sodium phosphate, pH 7.5, 0.9% saline (PBS), Vector<sup>®</sup> Red Alkaline Phosphatase Substrate Kit I (SK-5100), and 100 mM Tris-HCl, pH 8.2 Buffer. To prepare biotinylated antibody, add 10 ml of PBS to reagent tube, add 1 drop biotinylated antibody to the PBS, then mix gently. To prepare ABC, to 10 ml of PBS, add 2 drops each of Reagent A and Reagent B, mix immediately, then allow to stand 30 minutes before use. To prepare AP Red, which should be prepared immediately

before use, to 5 ml of Tris-HCl buffer, add 2 drops of Reagent 1 and mix well, add 2 drops of Reagent 2 and mix well, then add 2 drops of Reagent 3 and mix well.

#### EXAMPLE 8: DEPARAFFINIZATION AND REHYDRATION OF SAMPLES

5 [285] The purpose of this protocol is to remove paraffin from and rehydrate preserved tissues in preparation for IHC procedures. Materials and equipment include fume hood, vertical slide rack(s), three xylene (VWR #72060-088) baths, three 100% alcohol blend (VWR #72060-050) baths, two 95% alcohol blend (VWR #72060-052) baths, one 70%  
10 alcohol blend (VWR #72060-056) bath, and Tris-Buffered Saline (DAKO® S1968) + Tween® (DAKO S1966).

[286] Insert the slides into the vertical rack(s). Move slides through baths inside fume hood as follows:

15 Xylene 5 Minutes  
Xylene 5 Minutes  
Xylene 5 Minutes  
100% Alcohol 2 Minutes  
100% Alcohol 2 Minutes  
100% Alcohol 1 Minute  
20 95% Alcohol 2 Minutes  
95% Alcohol 2 Minutes  
70% Alcohol 1 Minute

[287] Finally, place slides into a container with TBST.

#### 25 EXAMPLE 9: STEAM METHOD OF TARGET RETRIEVAL

[288] The purpose of this protocol is to optimize antibody binding within paraffin embedded tissues. Materials and equipment included a steamer, deionized H<sub>2</sub>O, target retrieval solution, 10X concentrate (DAKO #S1699), 250 ml graduated cylinder, 15 ml graduated cylinder, staining dish(es), and deparaffinized and rehydrated tissue on microscope  
30 slides in immersed TBST. The procedure is to a) fill the steamer with deionized H<sub>2</sub>O to appropriate depth as indicated, b) turn the steamer on, c) in a graduated cylinder, measure 135ml of deionized H<sub>2</sub>O and pour into staining dish(es), d) pipette 15ml of target retrieval solution and release into deionized H<sub>2</sub>O, e) place the staining dish(es) into the basket of the steamer and heat for at least 10 minutes to preheat, f) add rack(s) containing tissue slides to  
35 heated target retrieval solution, g) cover and steam for 20 minutes, h) remove container from

steamer and let stand at room temperature for 20 minutes, i) transfer rack(s) with slides to container(s) of TBST, and j) slides are now ready for staining procedures.

#### EXAMPLE 10: ANTIBODY DETECTION

- 5 [289] The deparaffinized, rehydrated, and steamed (if needed) slides are loaded onto racks within a DAKO autostainer and then the autostainer is run according to the manufacturer's instructions. The slides are removed and the autostainer is turned off.

#### EXAMPLE 11: WESTERN BLOTTING

- 10 [290] The purpose of this protocol is to visualize the immunoreactivity of the antibodies described above against the particular GPCR on a western blot. Materials and equipment included western blot membrane, TBS Tween (TBST: 100 mM Tris-HCl pH 7.5, 150 mM NaCl, 0.1% Tween<sup>TM</sup> 20), 5% non-fat dried milk in TBST (blotto), antibody of interest (primary), peroxidase-conjugated AffiniPure goat anti-rabbit IgG (H+L) (secondary) –  
15 Jackson ImmunoResearch, ECL solution (Amersham Biosciences, Uppsala Sweden), film, developer D-19, fixer, rocking platform.

- [291] During the blotting procedure, the blot is kept wet at all times and on a substantially level surface. The Western blot is placed right-side up in 10 ml of blotto. The membrane is flipped over and the dish rocked so that the solution covered it. The membrane is then  
20 flipped back to the right side and solution is again rocked over it. The blot is then placed on a shaker for at least 1 hour. Ten ml of primary antibody are prepared by diluting 1:500 in blotto.

- [292] The blotto is removed from the Western blot and replaced with the primary antibody. The blot is flipped again and placed on the shaker for 1 hour. Secondary antibody  
25 and peroxidase-conjugated AffiniPure goat anti-rabbit IgG (H+L) are prepared 1:20,000 in 10 ml of blotto. The primary antibody is removed and the Western blot is washed 3 times with 10 ml of blotto. The blotto is removed and replaced with the secondary antibody solution. The blot is flipped and placed on the shaker for 1 hour. The secondary antibody is removed and the blot washed 2 times with 10 ml of blotto. The blotto is removed and the blot is  
30 washed 2 times with 10 ml TBST. ECL is prepared by combining equal amounts of Solution 1 and 2.

[293] The blotto is removed and 1 ml of ECL is placed on the blot. The blot is flipped and let sit for 1 minute. The blot is placed on plastic wrap and immediately covered with plastic wrap. The ECL is pressed out. The blot is placed on the film, then the film is developed.

5

[294] From the foregoing, it will be appreciated that, although specific embodiments of the invention have been described herein for purposes of illustration, various modifications may be made without deviating from the spirit and scope of the invention. Accordingly, the invention includes all permutations and combinations of the subject matter set forth herein

10 and is not limited except as by the appended claims.



## WHAT IS CLAIMED IS:

1. An isolated antigenic peptide according to any one of SEQ ID NOS. 692-2292.
- 5 2. An isolated antigenic peptide comprising an amino acid sequence that is at least about 90% identical to a sequence set forth in any one of SEQ ID NOS. 692-2292.
3. An isolated antigenic peptide that is an analog of an antigenic peptide according to any one of SEQ ID NOS. 692-2292.
4. An isolated antigenic peptide comprising a short antigenic amino acid  
10 sequence that is identical to at least 5 consecutive amino acids set forth in any one of SEQ ID NOS. 692-2292.
5. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to or contains no more than one conservative amino acid substitution over at least 7 consecutive amino acids set forth in any one of SEQ ID NOS. 692-  
15 2292.
6. A kit for the detection of antibodies against a particular GPCR in a sample comprising:
  - a) an isolated antigenic peptide according to any one of claims 1-5 and derived from the particular GPCR, and
  - 20 b) at least one of a reagent or a device for detecting the antibodies.
7. An isolated antibody having high specificity and high affinity or avidity for a particular GPCR comprising a peptide sequence that is identical to any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151,  
25 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is identical to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187,  
30 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.
8. An isolated antibody having high specificity and high affinity or avidity for a particular GPCR comprising a peptide sequence that is at least about 90% identical to any

one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using the peptide sequence that is  
5 at least about 90% identical to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

9. An isolated antibody having high specificity and high affinity or avidity for a  
10 particular GPCR comprising a peptide sequence that is an analog to any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using an isolated antigenic peptide comprising the  
15 peptide sequence that is the analog to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

10. An isolated antibody having high specificity and high affinity or avidity for a  
20 particular GPCR comprising a peptide sequence that is identical to at least 5 consecutive amino acids set forth any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced  
25 using a short isolated antigenic peptide comprising the at least 5 consecutive amino acids set forth in the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

30 11. An isolated antibody specific for a particular GPCR comprising a peptide sequence that is identical to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028,

1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955,  
5 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is identical to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270,  
10 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

12. An isolated antibody specific for a particular GPCR comprising a peptide  
15 sequence that is at least about 90% identical to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679,  
20 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using the peptide sequence that is at least about 90% identical to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086,  
25 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

30 13. An isolated antibody specific for a particular GPCR comprising a peptide sequence that is an analog to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028,

1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 5 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is the analog to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 10 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

14. An isolated antibody specific for a particular GPCR comprising a peptide 15 sequence that is identical to at least 5 consecutive amino acids set forth any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 20 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using a short isolated antigenic peptide comprising the at least 5 consecutive amino acids set forth in the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 25 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

30 15. A kit for the detection of antibodies against the particular GPCR of claim 5 comprising:

a) an isolated antibody according to any one of claims 7-14, and

b) at least one of a reagent or a device for detecting the antibody.

16. An assay for the detection of a particular GPCR in a sample, comprising:

a) providing an isolated antigenic peptide according to any one of claims 1-5,

b) contacting the isolated antigenic peptide with the sample under conditions suitable  
5 and for a time sufficient for the antigenic peptide to bind to one or more antibodies specific  
for the particular GPCR present in the sample, to provide an antibody-bound antigenic  
peptide, and

c) detecting the antibody-bound antigenic peptide, and therefrom determining whether  
the sample contains the particular GPCR.

10 17. The assay of claim 16 further comprising the step of binding the isolated  
antigenic peptide or the antibody to a solid substrate.

18. The assay of claim 16 or 17 wherein the sample is an unpurified sample.

19. The assay of any one of claims 15-18 further comprising, prior to the  
contacting, obtaining the sample from a human being.

15 20. The assay of any one of claims 15-19 wherein the assay is selected from the  
group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a  
radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay  
(ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an  
immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an  
20 immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a  
biosensor assay, and a low-light detection assay.

21. An isolated nucleic acid molecule encoding an antigenic peptide according to  
any one of SEQ ID NOS. 692-2292.

22. The isolated nucleic acid molecule according to claim 21 wherein the  
25 molecule encodes a naturally occurring human antigenic peptide.

23. An isolated nucleic acid molecule encoding an antigenic peptide that is at least  
about 90% identical to any one of the antigenic peptides set forth in SEQ ID NOS. 692-2292.

24. The isolated nucleic acid molecule according to claim 23 wherein the  
antigenic peptide is at least about 95% identical to the antigenic peptide.

30 25. The isolated nucleic acid molecule according to claim 23 or 24 wherein the  
molecule encodes a naturally occurring human antigenic peptide.

26. A process for producing an isolated polynucleotide comprising hybridizing a nucleotide encoding an antigenic peptide according to any one of SEQ ID NOS. 692-2292 to genomic DNA under highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

5 27. A method of identifying an amino acid sequence for an antigenic peptide from a candidate polypeptide sequence wherein the antigenic peptide has a length of about 5 to about 100 amino acids, the method comprising:

a) searching the candidate polypeptide sequence using a comparison window of the length, and

10 b) selecting against amino acid sequences of the length and having at least 3 characteristics selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising  
15 no charged amino acids.

28. The method of claim 27 wherein the method further comprises selecting against at least 5 of the characteristics.

29. The method of claim 27 wherein the method further comprises selecting against at least 7 of the characteristics.

20 30. The method of claim 27 wherein the method further comprises selecting against the 9 characteristics.

31. The method of any one of claims 27-30 wherein the method further comprises:

c) selecting against amino acid sequences of the length and having at least one of the following additional characteristics 1) sequences having at least 5 consecutive amino  
25 acids that are identical to an alternative amino acid sequence from an alternative polypeptide that is different from the candidate polypeptide, 2) posttranslational modification sites, and 3) highly hydrophobic sequences.

32. The method of claim 31 wherein the posttranslational modification sites are phosphorylation or glycosylation sites.

30 33. The method of claim 31 or 32 wherein the method further comprises selecting against at least 2 of the additional characteristics.

34. The method of claim 31 or 32 wherein the method further comprises selecting against the 3 additional characteristics.

35. The method of any one of claims 27-34 wherein the method further comprises performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence.

5 36. The method of any one of claims 27-34 wherein the method further comprises performing a BLAST analysis for the candidate polypeptide sequence.

37. The method of any one of claims 27-36 wherein the antigenic peptide has a length from 6 amino acids to about 50 amino acids.

10 38. The method of any one of claims 27-36 wherein the antigenic peptide has a length from 6 amino acids to about 20 amino acids.

39. The method of any one of claims 27-36 wherein the antigenic peptide has a length of about 20 amino acids.

40. The method of any one of claims 27-39 wherein the polypeptide is a protein.

15 41. The method of any one of claims 27-40 wherein the polypeptide is a human protein.

42. The method of any one of claims 27-41 wherein the polypeptide is a naturally occurring protein.

43. An isolated antigenic peptide that is specific for the candidate polypeptide of any one of claims 27-42 that is produced according to the method of any one of claims 27-42.

20 44. An antigenic peptide that is at least about 90% identical to the isolated antigenic peptide of claim 43.

45. An isolated antigenic peptide that is an analog of the isolated antigenic peptide of claim 43.

25 46. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to at least 5 consecutive amino acids of the isolated antigenic peptide of claim 43.

30 47. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to or contains no more than one conservative amino acid substitution over at least 7 consecutive amino acids of the isolated antigenic peptide of claim 43.

48. A kit for the detection of antibodies against the candidate polypeptide of any one of claims 43-47 in a sample comprising:

a) an isolated antigenic peptide according to any one of claims 43-47 and derived from the candidate polypeptide, and

b) at least one of a reagent or a device for detecting the antibodies.

49. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 43, wherein the antibody was produced using the isolated antigenic peptide of claim 43.

50. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 44, wherein the antibody was produced using the isolated antigenic peptide of claim 44.

51. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 45, wherein the antibody was produced using the isolated antigenic peptide of claim 45.

52. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 46, wherein the antibody was produced using the isolated antigenic peptide of claim 46.

53. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 47, wherein the antibody was produced using the isolated antigenic peptide of claim 47.

54. The isolated antibody of any one of claims 49-53 wherein the antibody has high specificity and high affinity for the candidate polypeptide.

55. A kit for the detection of antibodies against the candidate polypeptide of any one of claims 43-47 comprising:

a) an isolated antibody according to any one of claims 49-53, and

b) at least one of a reagent or a device for detecting the antibody.

56. An assay for the detection of a candidate polypeptide in a sample, comprising:

a) providing an isolated antigenic peptide according to any one of claims 43-47,

b) contacting the isolated antigenic peptide with the sample under conditions suitable and for a time sufficient for the antigenic peptide to bind to one or more antibodies specific for the candidate polypeptide present in the sample, to provide an antibody-bound antigenic peptide, and

c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the sample contains the candidate polypeptide.



57. The assay of claim 56 further comprising the step of binding the isolated antigenic peptide or the antibody to a solid substrate.

58. The assay of claim 56 or 57 wherein the sample is an unpurified sample.

59. The assay of any one of claims 56-58 further comprising, prior to the  
5 contacting, obtaining the sample from a human being.

60. The assay of any one of claims 56-59 wherein the assay is selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an  
10 immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.

61. An isolated nucleic acid molecule encoding an antigenic peptide according to any one of claims 43-47.

15 62. The isolated nucleic acid molecule according to claim 61 wherein the molecule encodes a naturally occurring human antigenic peptide.

63. An isolated nucleic acid molecule encoding an antigenic peptide that is at least about 90% identical to any one of the antigenic peptides set forth in claims 43-47.

64. The isolated nucleic acid molecule according to claim 63 wherein the  
20 antigenic peptide is at least about 95% identical to the antigenic peptide.

65. The isolated nucleic acid molecule according to claim 63 or 64 wherein the molecule encodes a naturally occurring human antigenic peptide.

66. A process for producing an isolated polynucleotide comprising hybridizing a nucleotide encoding an antigenic peptide according to any one of claims 43-47 to genomic  
25 DNA under highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

SEQ ID NO:	LSID	Gene	Source ID	Sequence	Code	SpeciesName
526	160397	Latrophilin-2	NP_036434.1	MVSSGCRMRS LWFIIVISFL PNTEGFSRAA LPFGLVRREL SCEGYSIDLRCPGSDVIMIE SANYGRTDDK ICDADPFQME NTDCYLPDAF KIMTQRCNNR TQCIVVTGSD VFPDPCPTY KYLEVQYECV PYIFVCPGL KAIVDSPCIY EAEQKAGAWC KDPLQAADKI YFMPWTPYT DTLIEYASLE DFQNSRQITTT YKLPNRVDGT GFVVDGAVF FNKERTNIV KFDLRTRIKS GEAIINYANY HDTSPYRWGG KTDIDLAVDE NGLWVIYATE QNNGMIVISQ LNPTYLRFEA TWETVYDKRA ASNAFMICGV LYVRSVYQD NESETGKNSI DYINTRLNR GEYVDVFPFN QYQYIAADV NPRDNQLYVW NNNFILRYSL EFGPPDPAQV PTTAVTITSS AELFKTIIST TSITSQKQPM STTVAGSQEG SKGTPKPPAV STTKIPPITN IFPLPERFCE ALDSKGIKWP QTQRGMMVER PCPKGTRGTA SYLCMISTGT WNPKGPDLSN CTSHWVNQLA QKIRSGENAA SLANELAKHT KGPVFAGDVS SSVRLMEQLV DILDAQLQEL KPSEKDSAGR SYNKAIVDTV DNLLRPEALE SWKHMNSSEQ AHTATMLLDT LEEGAFVLAD NLEPTRVSM PTENIVLEVA VLSTEGQIQD FKFPGLKGA GSSIQLSANT VKQNSRNGLA KLVFIYRSL GQFLSTENAT IKLGADFIGR NSTIAVNSHV ISVSINKESS RVYLTDPVLF TLPHIDPDNY FNANCSFWNY SERMTMGYWS TQGCKLVDIN KTRITCACSH LTNFAILMAH REIAYKDGVBH ELLLTVITW GIVISLVCLA ICIFTFCFR GLQSDRNTIH KNLCINLFIA EFIFLIGDK TKYAIACPIF AGLLHFFFLA AFAWMCLEGV QL'YLM'VEVF ESEYSRKKY YVAGYLPAT VVGVSAAIDY KSYGTEKACW LHVDNYFIWS FIGPVTIFIL LNIIFLVITL CKMVKHSNTL KPDSSRLNI KSWVLGAFAL LCLLGLTWSF GLLFINEETI VMAYLFTIFN AFQGVFIF HCALQKKVRK EYGKCFRHSY CCGGLPTESP HSSVKASTTR TSARYSSGTQ SRIRRMWNDT VRKQSESSFI SGINSTSTL NQGHSLNNAR DTSAMDTLPL NGNFNNSYSL HKGDYNDVSQ VVDCGLSLND TAFEKMISE LVHNNLRGSS KTHNLELTL VPVIGGSSS EDDAIVADAS SLMHSDNPGLELHHKELEAP LIPQRTHSL YQPQKKVKSE GTDSYVSQLT AEAEHLQSP NRDSL'YTSMP NLRDSPYPES SPDMEEDLSP SRSENEIDIY YKSMPNLGAG HQLQMCYQIS RGNSDGYIIP INKEGCIPEG DVREGQMQLV TSL ccg-cggctgg gagacagcga gccagagctt ggggtttgtt gcagagcca cggcgggggc tggggc-gagt ggccggcaltg gctgaaggct gc-gctc'igca accttgaaga gccgtc'igcat tgaagaggcca gggacagaggga gacgggtg'cg atggcagagc gcggcccccgc cgcctgcgcc gggcg-gggccc ggcctggcctgc agccgcgcga ggaagcggggc tgcctc'igcg cgtccatgga gca-ggggaa gggc-gaaact ccggagcgcc gcgtcc'igc gccctgc'gcg cggac'igcgc aagggggc-ga gccgcgcgg accgcgagg aagagacccc cgcctcagcc cgcagcgccg gcgtcc'igc gcccgggggc gcccgggggc acatcgagg gcagcgagg gacagcgcc gcgggagagg ccggcgcggg agggcgccgc agcaatgcc ggcccgctag ggc'igc'icg cttcc'igcc ctggggctgc tggctcgcc cggggccagc ggcgcgggc gcctctc'ig cggcgccccc tgcagc'igcg accggcgaccg tgggtggac tgcctcggga aggggctgac gggcggtgcc ggggggctca gcgocctcac ccaagcg'cg galatcagta tgaacaacal tactcagttg ccagaagatg cattaaaga ctttcctttt ctagaagagc lacaa'lgcg gggcaacgac cttctt'ltta taccaccaaa ggctc'tgctt ggg'tgaaag aactcaaa'gt tctaacgctc cagaataatc agtgaaaaac agtaccaggt gaagccaltc gagggc'tgag tgc'tt'igcag tctt'igcgt tga'lgccaa ccatlata'cc tcatgcccg aggacag'tt tgaaggac'tt	P	Homo sapiens
527	160411	G Protein-Coupled Receptor GPR48	NM_018490		A	Homo sapiens

[illegible]

528	160411	G Protein- Coupled Receptor GPR48	NP_060960.1	<p>atgtaataa taaaaataga agaagaaga alaaagctta gtctgtgtc ttataaatt aaaaatttta ctgtattcc atctatggc  ttaaaccta ttactgggtg gtagcttaaa gttataattg ttcaatagt ttttgaca gtgtgtaaa tcaatagcaa accactggc  atattagta ttctgaat actaaaaaa tccagctaga ttgagttta ataataaac tgcacalact gtgcatalaa lgaatttta  tcttatgtaa altatttta gaacaaagt tgggaatgt eggttcigt catttggti aataaagct acctctaaa ctatagtggc  tgccagtagc agactgttaa attgtggtt atatacttt tgcattgtaa atagtcttg ttgacattg tcaagttaat aaaaacagaa  tcttgata tcaaatcat gtagttgtg taaaatggg gaaggaftta ttacaggt gtgtaatt tgaaggcca actiattaca  agtttaaaa atgtcata tgaatatta cacatcat aatalataa tcaatactg gtaagaact ccaataataa aggttttc  caaaattcag gtaattgaaa attttcatt ttattcatt aaaaactaga alaaacagaa taaaaagtg ttaacttg tgcataagg  tatgaatac aatattgac tcaagtgtt gaattataa agttctaga aagcaaaaa a</p> <p>MPGPLGLLCF LALGLLSAG PSGAAPLCA APCSCDGD RR VDCSGKGLTA  VPEGLSAFTQ ALDISMNNIT QLPEDAFKNF PFLEELQLAG NDLSFIHPKA  LSGLKELKVL TLQNNQLKTV PSEAIRGLSA LQSLRLDANH ITSPEDSFE  GLVQLRHLWL DDNSLTEVPV HPLSNLPTLQ ALTLALNKIS SIPDFAFTNL  SSLVVLHLHN NKIRLSQHC FDGLDNLETL DLSYNNLGEF PQAIAKARPSL  KELGFHSNSI SVIPDGA FDG NPLLRTHLY DNPLSFVGN ASHNLSDLHS  LVIRGASMVQ QFPNL TGTVH LESLTLTGK ISSIPNNLCQ EQKMLRTL DL  SYNNIRDLPS FNGCHALEEI SLQRNQIYQI KEGTFQGLIS LRILDSRLN IEHISRAFA  TLGPITNLDV SFNELTSFT EGPNGLNQLK LVGNFKLKEA LAAKDFVNLR  SLSVPYAYQC CAFWGCDSA NLNTEDNSLQ DHSVAQEKGT ADAANVTSTL  ENEHSQIII HCTPSTGAFK PCEYLLGWSM IRLTVWFIL VALFFNLLVLTTFASCTSL  PSSKLFGLI SVSNLFMGTY TGILTFLDV SWGRFAEFGI WWETGSGCKV  AGFLAVFSE SAIFLLMLAT VERSLSAKDI MKNKGKSNHLK QFRVAALSAF  LGATVAGCFP LFHRGEYSAS PLCLPFTGE TPSLGFTVTL VLLNSLAFLL  MAVIYTKLYC NLEKEDSEN SQSSMIKHVA WLIFTNClFF CPVAFFSFAP LITAISPE  IMKSVTLIFF PLPACLNVL YVFFNPKFKE DWKLLKRRVT KKS GSVSVSI  SSQGGCLEQD FYDYDCGMYSH LQGNLTVDCD CESFLLTKPV SCKHLIKSHS  CPALAVASCO RPEGYWSDCG TSAHSDYAD EEDSFVSDSS DQVQACGRAC  FYQSRGFPLV RYAYNLPRVK D</p>	P	Homo sapiens
529	160435	LS160435 Receptor	AX147830	<p>aactggaagg gcagccgtct gccgccacg aacacctct caagcacit gagtgaccac ggcttgcaag ctggggcgtg  gcccccgag tcccgggtc tggagcacgg ccgtcgactt aagcgttgca tccgttacc tggagacccct ctgagctctc  acctgtact tctccgtc ctcttgaca gagcccgagg gaggaacct ccaaggatga ggcccggaac agcacggcc  cggacaacgc gacgtcgag atgtcgcca accggcgat ccgggtggcc ctgcccgtg tgtactcgt gggtggcggc  gtcagcalcc cgggcaacct ctctctctg tgggtgctgt gccggcgcat gggggccaga tcccgtcgg tcatcttcat  gatcaacctg agcgtcacgg acctgatgt ggccagcgtg ttgctttcc aaatctacia ccattgcaac cggcaccact  gggtaltcgg ggtgtgctt tgaacgtgg tgaacgtggc ctttacgca aacalgtatt ccagcalct caccalgaac  tgtatcagcg tggagcgtt octtgggggtc ctgaccgc tcaagctcaa ggcgtggcgc cgcctggtt acgcgtggc  cgcgtgtgca gggacctggc tgcgtctct gaccggcctg tcccgtcgg ccgcaccca tctaacctac ccgtgtcag  ccctgggcat calcaatgc ttgacgtcc tcaagtgac gatctccc agcgtggcca tggggccgt gtctcttc  accatctca tctgtgtt octatccc ttgtgtalca ccgtggcttg ttacggcc accatctca agctgtgog  cacggagagag gcgcacggcc gggagcagcg gagggcggc gtagggcctgg ccgggtggt ctgtcggcc ttgtcacct</p>	A	Homo sapiens

530	160435	LS160435 Receptor	LR80		<p>gcttcgcccc caacaacttc gcttccttcg cgcacalcgt gtagccgcttg tttacaggca agagctacta ccacgtgtac aagctcacgc tctgtctcag ctgcctcaac aactgtcttg accgttgtt ttattacttt ggtgtccggg aattocagct ggccttcggg ggaatttttg gctgcggccc ggtgtccaga gacaccttg acacgcggcg cgaaggcttc tttccggca ggaaccacgc cgtgcctcc gaggccggcg cgcaccttga aggtatggag gtagccacca gggccggctt ccagaggcag gtaggtgtgt tctagctcc gggggcgag ctggagagc cggggcgca gcttggagga tccaggggcg catggagagg ccacggcgcc agaggttcag gtagaacagc tgcgtgtc ccaggcacg cagaggcccc gtagggagg gttccaggc ttattctc ccaggcacg cagaggcaac ggttaggag ggttccagg ctacacag gtaggggaaa cagcaaac ccaggcacg acagggtgt tttatctc cagagggttc ctgtctct cgtgtcagg gtagcgttg tgcaccag ccggglaa tttgtatt ttttagtag agctggcg tccccgga gctcttga cactctac accgttcat accggaggat ggaattca ccaggccac cgcctaccg actgggtt tggatctt cgtggcgga actggagcc cactccag ctctctcc tctgacalc gttccttag acacttcc ataccgagg atggatc ataccggccc accgctacc cgtcgggt tctggatc ctgttgagg gaactgcag cccattcc agctcttc cgtctgaca tgccttga gttgtgttc tggctctc cattctct cagggttct ggtctcga gccggcgca cgcgaatt tctgttatt tactcagg gcactgtgt tctgtgtt ggaattct ttacaggga ggcctgggg ctctgcaag tgcgtactc tccgtgcca ctccctca cacacacc ccccgtgc ggaattc</p>	P	Homo sapiens
531	160889	Platelet Activating Receptor Homolog (H963)	NM_013308		<p>MQVNSTGPD NATLQMLRNP AIAVALPVVY SLVAAVSIPG NLFSLWVLCR RMGPRSPSVI FMINLSVTDL MLASVLPFQI YYHCNRHHWV FGVLLCNVVT VAFYANMYSS ILTMTCSIVE RFLGVLYPLS SKRWRRRYA VAACAGTWLL LLTALSPLAR TDLTPVHAL GHCTFDVLK WTMPLPSAMW AVFLFTIFL LFLIPFVITY ACYTATILKL LRTEEAHGRE QRRRAVGLAA VLLAFVTCF APNNFVLLAH IVSRLFYGKS YHVYKLTLC LSLNNCLDP FVYFASREF QLRLREYLG RRVPRDILDT RRESLSART TSVRSEAGAH PEGMEGATRP GLQRQESVF gaatcggcc aaagaggctt agctctct gaagactgc agcaaggctt gctgaggctt acagaagata gccacagt ttggagtg tttaagt gacttgaga tgcactgac tgcctgga tcttgctt atacttacc agctacaa ccttgagtc ttgaaatt ttcttca aaagcagc atcttact tccctcaga tgaacaacag tctgtctc tgcctgctt ataaagat ggagccalc agtatttt ttattagt ttcttgtt ggaatttg ggaattgt tgcacactg gctttalac agaaatac gaalcacagg tcttgagca tctactaa taattgctt acagcgtt tctgttac tctggcalt ccaatgaaa ttgttgtga cttgggtgt gaccttga agctgaagt attcactgc caatgaacag cctgctcat ctatcata atgtattat caattctt cttagcatt gtcagcatt accgtgtct tgcactgaca cagactgca agactacg aatacaga cccggtttg ccaaaatga atcaaccgtt ggtggccta tggctctt talaagggt ccaatalga tttccat caaagacalc aaggaaga caaatgtgg ttatgaagg aattggag aattggat tcttgaca attcatag ttagcaata ttttaatt tctagcalt calttaala tccaattgc tgaattgc acagctac agaaacaag aatgaaaa ttaccaat gtagaagg ctctcatca calacttia gtagaccag gctacalc atgttgtt ccttaca tttccgtggc tgtctggc ctgtgttg cagaagcalt aactgattgc tcaaccagga ttacattt caaagcaca gaggctaac tgcctggc tgtctggc ctgtgttg atctatctt gactatcac ctctcaaaag cttccgtc aaaggctt gtagacttg cctacata agagaccaag gctcagaag aaaaattag atgtgaaa aatgcala aagcaggat ttgtgtc ccaatttg cctacagg ccaataag aattatgt tgaagata aaaaaaaa aaagggcc gc</p>	A	Homo sapiens
532	160889	Platelet Activating Receptor	NP_037440.1		<p>MTNSSFFCPV YKDLPEFTYF FYLVFLVGII GSCFATWAFI QKNTNHRCSV IYLINLLTAD FLTLALPVK IVVDLGAVP KLKIFHCQVT ACLIYNMYL SIIFLAFVSI DRCLQLTHSC KIYRIQEPGF AKMISTVVWL MVLLMVPNM MIPKDIKEK</p>	P	Homo sapiens

Homolog (H963)			
533	161024	Protein A	NM_019858
			<p>SNVGCMEFKK EFGRNWHLLT NFICVAIFLN FSAILISNC LVIRQLYRKN  DNENYPNVKK ALINILLVTT GYIICFVPHY IVRPYTLSQ TEVITDCSTR ISLFKAKEAT  LLLA VSNLCLF DPILYYHLSK AFRSKVTEIF ASPKETKAQK EKLRCENNA'  gagggagggag gggggggggg cggggggggg caggcagcggg gagccgggag gagccggcgc gggagggcgc lccatggc  agggcggggc gcagccgggag agggccggc caggggggcgg agcccccacc ccaaatccct gggggcatcca gagagatcct  gactgggcaa gaaccagagg caaagagagac cggagagcc cagcaggggg accagaagacc ccagggcagc ctcatagttg  ggaaagtgagc cagcttgctt gcccaccaa ttgcaggagat gcttaaggaa gggccggccc agtataaag cggaggatig  cctctggcga cctcagctt cctcccgcc cctacalc lggccatgc lggggccatc algcaatgct gagcactggg  gtgagccggg gggcagcccg cctggcgaca gggcgaggat lgggggggagc algggagggc ttggagggg ggcctcgggg  tgaagacctag ccccccccc cacagagcgc aagggggggg gggggcggagc ataggatggc lggggggggg gggggggggcag  aggagggccc cctggcctcc aagcattgt cctggcggc cggggggcgc cggccagcgg lggccatgc cggggatc  ctcagcatct cggccaaagca gcaagagcac aagccatggg agcggcggc cggcttcta gggggcacac acatactat  ggcagcggc cccctacca ccttggcgt gggcagcggc cggcggcggc cttctccga ctatgactgg aacggagagta  tctgcaaggct cttggctcc acctactaca cctggcgctt gggccacggc ttacggggc cctccctc claccatgc  alggggaggg lggcgggg cgtcaactac cggctcagca acggccaaaga gcaaggcagc cagggcggc lggggcatcg  gaggggagc ttactctt ccacatggc ctcattggc lggcacaaca accggggagc ctactatgc cggcgggcggc  agttcatagt cccaagalc gggcggcggc ttgggggttg cttagcctc ttgctacttg ggggaattgt caggggcttg gctggggg  ccatccctt claccagaca cggggggccc gggccgggag gggcggggag gggccggggg lggggggggg ggggggggac  aagggggggg gggcaggggg cggggggg cggggggg ttgaggggac agccatggg ggggggggag cccgggggaa  ggggggggc lggcggggg gctggggg lggccaaagca lccggcagg tcaacaactt gggcaggcggc atcggcttc  tctatgact acctcagggg gggggggc lggggggg cttctctcc clcaggcggg actcggggc ccccggggag  gggggggg lggcggggg cttcagggc caggcggc lggcggggg cttcactgg lccggggg gctacggcgg  cggcggggc acagggggg agcaatggc gggccatcag lcgaggaggg agggggagga cggagggggg lggagggact  algcaagggg ccgggggttg aaggggttg ttgagggaa cggggggcaca gggccagggg ggggggggac cggccagggg  aagcggcgg cggggggg cagggggg cctccttg aggggggga ctactacag gggggggg cccgggggct  gtccatgat gagacaaca ttctctac cccgggggaa caggggctct lccggcaca gggggcatcc lcgatgaca  lccggggctt cccagccag agccggggcc lgggggggct lccgggggag cggggcaca gacacagggtt ggggggagag  gagggagagg aagggggcga aggggggggg cggggggg cggggggg ttggcgaat cggggggg gggggggg gggcaggggg  gggggggg cggggggcgg gctcttccg ggggggggac accacttca lggaggagac acctggctt cctcggagc  cctcaccagg gcatctct cggcggggc cctcgggg cctcgggg cggcgggct cctggggc cctggagagc  aggggggg gactcttt gggggggg gcaaggagac gctggctcctt gggggggggg gaggaaagg caaggggcgg  gggggggg lggggggcag gcaacccat ctttccag cggacccgtt gggggggg agggcggcgg aactcagggg  agaaaggcgg agggaggtaac acctatct ggggggggag cctcagagact cgggggggag gggggcctaga  tttgggggctt aggggggctt gctctctcc atcaaggga ccaaggggc tactcaggtt ccatcccc tagcaatag tattaaagtc  tgaagggttg ccatgg</p>
			<p>A  Homo sapiens</p>
534	161024	Protein A	NP_062832.1
			<p>MARGGAGAE ASLRNALSW LACGLLALLA NAWILSISA KQKHKPLEL  LLCFLAGTHI LMAAVPLTTF AVVQLRRQAS SDYDWNESIC KVFVSTYYTL  ALATCFTVAS LSYHRMWMVR WPVNYRLSNA KKQALHAVMG IWMVSFILST  LPSIGWHNNG ERYYARGCQF IVSKI GLGF VCFSLLLGG IVMGLVCVAI  TFYQTLWARP RRARQARRVG GGGGTKAGGP GALGTRPAFE VPAIVVEDAR</p>
			<p>P  Homo sapiens</p>

535	161214	Galanin Receptor GalR3	NM_003614	<p>GKRRSSLDGS ESAKTSLOVT NLVSAIVFLY DSLTGVPILV VSFFSLKSDS  APPWMVLAVL WCSMAQITLL PSFIWSCERY RADVRTVWEQ CVAIMSEEDG  DDGGCCDDYA EGRVCKVRFD ANGATGQSR DPAQVKLLPG RHMLFPPLER  VHYLQVPLSR RLSHDETINF STPREPGSFL HKWSSDDIR VLPASRALG  GPPEYLGQRH RLEDEEDEEE AEGGGLASLR QFLESGVLGS GGGPPRGPGF  FREEITTFID ETPLSPPTAS PGHSPPRRP LGLSPRRLSL GSPESRAVGL PLGLSAGRRC  SLTGGEESAR AWGSGWGPNG PIFPQLTIL</p> <p>tccagggtgc cgcgtgatg gggagatggc tgaigccag aacattcac tggacagccc agggaggtg gggccgtgg  cagtgccgt ggccttgcc ctaattccc tgcgtggcac agtgggcaat gggctgggctc tggcagtc cctcagccct  ggccggagtg cctggcaggga gctggcagc accagggacc tgcattct caacctggcg gttgctgacc tctctcat  cctgtgtgc gtgcccctc agggccacct ctacagctg gatgcctggc tcttggggc cctgtgtgc aagccgtgc  acctgcat ctactacc atgiacgca cagctttac gctggctgt gctccgtgg acaggctac ggcgtgtgcg  caccgtgc gctggcgcc cctggcagc cgggtaacg cccggccgc agtggggctg gttggctgc tggggcgct  cttctggcg cctactca gctactagc caccgtgcg taccgtgcg tggagctgc cgtgcccgc tggagggagc  cggccggcg cgcctggac gttggccact tgcgtccgg ctactgtgc cctgtgtgc tgggtgagct ggcctacggg  cgcatgtgc gcttctgt ggcggccgtg gttcccgcg gtcggcgggc ggcggggcg cggcgagggc cagcggggcg  cggggggcg gcatgtgc cgtgtggcg gctactagc ctgtgtgg gtcggaccca cggcctalc ctgtctct  ggtactggcg ctgccttc agccggcca cctagctgc cggcgtggc tcatagtc tggcctacgc caactctgc  ctaacccgc tgcctacgc gctgcctgc cgcacttc ggcggctt cggcgctgc tggccgtgc ggcggcgag  cggccacct gcccggcg cttgtgtgc ggtccggcc gctgtcgg gcccacgg cgtcccgga gacgcccgg  ctagcggag gctgtgct gttggcgcc agggccggga gcccaggag ggaacgtcc acggcgagga ggtgcccga  ggaccgaat aaacctgc gctgtgact cgcctgt</p>	A	Homo sapiens
536	161214	Galanin Receptor GalR3	NP_003605.1	<p>MADAQNISLD SPGSVGAVV PVVFALIFLL GTVGNGLVLA VLLQGPSAW  QEPGSTDLF ILNLAADLC FILCCVPFQA TTYTLDWLF GALVCKAVHL  LYLTMYASS FTAAVSVDRLCVPWEDAR RALDVAFTA AGYLLPVAVV  ALFSAPYLSY YGTVRYGALE LCVPWEDAR RALDVAFTA AGYLLPVAVV  SLAYGRTLRF LWAAVGPAGA AAEEARRRAT GRAGRAMLAV AALYALCWGP  HHALLCFWY GRFAFSPATY ACRLASHCLA YANSCLNPLV YALASRHFA  RFRLLWPCGR RRRHRARRAL RVRPSSGP PGCPGDARPS GRLLAGGGQG  PEPREGPVHG GEARGPE</p> <p>alggcgctga ccccgatgc cccgagcagc ttccctggc tggccggcac cggcagctct gtcggggagc cgcctggcg  cccaacga acctcaaa gctctggc cagcccgacc gagccagct cctggagga cctgtggcc acgggcaaca  tgggactct gctgtggcc atggcggtgg tggcggtgtt gggcaacgc taccgctgg tggctacgt cgcctccct  cgtgaggtgg cttcaltga cgtactgt gtaacctgg cgtggcca cctgtgtac cgtcagca tcccttcat  cgtggccacc taccacca aggaaggca ctccggggac gttgggtgc cgtgtctct cggcctggac ttctgacca  tgcagcag catctacg ctgacgtga tgaagagca gctactgct gtcgtgtgc ggcgtgtga caccgtgag  cggcccaagg gctaccgcaa gctgtgtggc ctgggacact ggtgtgtgc acgtgtccc tgalgtggc  caltgggtgc gtcggcggg gtcacaag cctgtgtgc cccgctggg gcccggcg ccaccggcc tactgagc  tgccttcg caccagatc gtcggggcg gctgtgtcat cgggtgtc taccgtggc tggcccgcg ctaccggc  tcgacggcg cctctcaa gtcggggcg cggccggggc cggcgcgct gtcggcggt cgtggcggt tgcctctt</p>	P	Homo sapiens
537	161221	Urotensin-II Receptor (GPR14)	NM_018949	<p>alggcgctga ccccgatgc cccgagcagc ttccctggc tggccggcac cggcagctct gtcggggagc cgcctggcg  cccaacga acctcaaa gctctggc cagcccgacc gagccagct cctggagga cctgtggcc acgggcaaca  tgggactct gctgtggcc atggcggtgg tggcggtgtt gggcaacgc taccgctgg tggctacgt cgcctccct  cgtgaggtgg cttcaltga cgtactgt gtaacctgg cgtggcca cctgtgtac cgtcagca tcccttcat  cgtggccacc taccacca aggaaggca ctccggggac gttgggtgc cgtgtctct cggcctggac ttctgacca  tgcagcag catctacg ctgacgtga tgaagagca gctactgct gtcgtgtgc ggcgtgtga caccgtgag  cggcccaagg gctaccgcaa gctgtgtggc ctgggacact ggtgtgtgc acgtgtccc tgalgtggc  caltgggtgc gtcggcggg gtcacaag cctgtgtgc cccgctggg gcccggcg ccaccggcc tactgagc  tgccttcg caccagatc gtcggggcg gctgtgtcat cgggtgtc taccgtggc tggcccgcg ctaccggc  tcgacggcg cctctcaa gtcggggcg cggccggggc cggcgcgct gtcggcggt cgtggcggt tgcctctt</p>	A	Homo sapiens

Homo sapiens

P

ctgggctgc ttcttgocct tctggcctgc gcagctgctc gccagatacc accaggccccc gcaggccgccc cggacggcgc  
 gcatgcaaa ctactgacc acctgocctca octacggcaa cagctgcgccc aaccccttcc tctacgct gctcaccagg  
 aactaccgg accacttgcg cggccgctgc cggggccggs gcagcggggg aggcgggggg cccgttccct ccttgcagcc  
 ccgcggccgc ttccagcgt gttcggggccg ctcctgtct tcttgcagcc cacagccccc tgcagccctc gttctggccc  
 cagcggcccc ggcccgact gcgcccggg gtcccaggcc cccggcgga  
 MALTPESPSS FPLAATGSS VPEPPGGPNA TLNSSWASPT EPSSLEDLVA  
 TGTIGTLLSA MGVVGVVGN YTLVVTCSR RAVASMYVYV VNLALADLLY  
 LLSIPFIVAT YVTKWHFGD VGRVLFGLD FLTMHASIFT LTMSSERYA  
 AVLRLDTVQ RPKGYRKLK LGLTWLLALL TLPVMLAMRL VRRGPKSLCL  
 PAWGPRAHRA YLTLFATSI AGPGLLIGLL YARLARAYRR SQRASFRRAR  
 RFGARALRLV LGIVLLFWAC FLFWLWQLL AQYHQAPLAP RTARIVNYLT  
 TCLTYGNSCA NPFLYTLT TR NYRDHLGRV RGPGGGGRG PVPSLQPRAR  
 FQRCSGRSL SCSFPQPTDSL VLAPAAPARP APEGPRAPA

NP\_061822.1

Urotensin-II  
Receptor  
(GPR14)

161221

538

Homo sapiens

A

atggcttga atggcgtgc ggccaggggg cactitgacc ctgaggacti gaaccigact gacgaggcac tgcagaccaa  
 gtacttgggg cccagcaga cagagctggt catgcccac tctgcccacat acctgctgat ctctggtggt ggccgtgtgg  
 gcaatgggct gaactgtct gtcacttgc gccacaaggc catgcgcagc octaccaact actaacctcti cagccgtggc  
 gtctgggacc tgcgtgtgct gctgttgggg ctgccccttgg agctctatga gctgtggcac aactacccct tcttcttggg  
 cgttggggc tgcatttcc gcagctact gtttgaatg gtcgtcttgg cctcagtgct caacgtcact gcccgtgagc  
 tggaaagcta tctggccgtg gtgcacccac tccaggccag gtccatgtgt acgaggccc algtgcgccc agtcttggg  
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 ctgctcagc aggaaggcaa ggccaggggc tctgcagcag ccaggtccag atacactgc aggtctcagc agcagatcg  
 ggccgggaga caagtgaaca agatgctgt tctcttggc gtgtgttttg gcatctgtg ggcccgttc cagccgac  
 gcgtcagtg gagcgtctg tccagctgga cagatggcct gcaactggcc ttccagcagc tgcactgat ctccggcalt  
 ttcttacc tgggctggc ggccaaacc gtctctata gccatgic cagccgcttc cgaagagact tccaggaggc  
 ccttgcctc ggggcctgt gcatcgct cagacccgc cacagctccc acagctccag caggatgacc acaggcagca  
 ccttcttga tctgggctcc ctgggcagct gggtccacc cctggctggg aacgatggcc cagaggcgca gcaagagacc  
 gatccactct ga

NM\_006056

G Protein-  
Coupled Receptor  
GPR66

161249

539

Homo sapiens

P

MACNGSAARG HFDPEDLNL DEALRLKYL G PQQTFLFMPI CATYLLIFV  
 GAVGNGLTCL VILRHKAMRT PTNYLFLSLA VSDLLVLLVG LPLELYEMWH  
 NYFLLGVGG CYFRTLLFEM VCLASVLNVT ALSVERYAV VHPLQARSMV  
 TRAHVRRVLG AVWGLAMLC LPNTSLHGIR QLHVPCRGPV PDSA VCMLVR  
 PRALYNMVVQ TTALLFFCLP MAIMSVLYLL IGLRLRRERL LLMQEA GRG  
 SAAARSRYTC RLQQHDRGRR QVTKMLFVL VVFGICWAPF HADRVMWSVV  
 SQWTDGLHLA FQHVHVISGI FFYLGSAANP VLYSLMSSRF RETFQEALCL  
 GACCHRLRPR HSSHLSRMT TGSTLCDVGS LGSWVHPLAG NDGPEAQET DPS  
 atggctaac ttgacaata cactgaataa ttcaagatgg gtacgaacag taccagcact gctgagattt actgtaagt  
 cactaalggt aaatttcaat actccctcta tgcacacacc tatatctca tattcttctg tggcttctg gctaacagtg cagccttgg  
 ggttctgtgc cgtctcatca gcaagaaaaa taaagccatc attttcatga tcaacctctc tgtggctgac ctgtcagc tattaclt

NP\_006047.1

G Protein-  
Coupled Receptor  
GPR66

161249

540

Homo sapiens

A

atggctaac ttgacaata cactgaataa ttcaagatgg gtacgaacag taccagcact gctgagattt actgtaagt  
 cactaalggt aaatttcaat actccctcta tgcacacacc tatatctca tattcttctg tggcttctg gctaacagtg cagccttgg  
 ggttctgtgc cgtctcatca gcaagaaaaa taaagccatc attttcatga tcaacctctc tgtggctgac ctgtcagc tattaclt

NM\_014499

Purnergic  
Receptor P2Y10

161251

541



542	161251	Purnergic Receptor P2Y10	NP_055314.1	<p>acccctccgg atttactat acatcagcca ccactggcct ttccagagag ccccttggct gctctgcttc taccgaagt altcaacat  glatgccagc atgtgttcc tgacgtgcat cagcttcaa aggtgtcttt ttctctcaa gcccttcagg gccagagact ggagcgttag  gtacgaltg ggacacagtg ctgccalcig gactgtgtg ggacatgctt gtttgcaatt tccalcctg agaagcacag  acttaacaa caacaagcc tcttggctg atctggata caagcaaatg aatgacgttg cgttggctgg gatgallaca gttgtcagc  ttcaggatg tgtatccca gtagatca tgcaltggg taccggaaa actatlatat ccttgagaca gccaccaag gcttccaag  ggacagtg gaggcagaaa gactgcgga tgggttcat gttgttca gttcttca tctgttca tccatcat altaactta  ttttttac calgglaag gaaacalca ttacgattg tccgtgtg cgaatgcac tgaattcca cccctttg cttgtcctg  caagctctg ctgcttgg gatccaatc ttattact tatggctca gagtttgag accaatc cggcaatggc agttctgta  ccgctccc cctcagagc aaggagagtg gtatcaat gatggcga  MANLDKYTET FKMGSTST AEIYCNVTNV KFQYSLYATT YLIFIPGLL  ANSAALWVLC RFISKKNKAI IFMNLVAD LAHVLSPLR IYYYISHWP  FQALCLLCF YLKYLNMYAS ICFLTCISLQ RCFLLPKR ARDWKRRYDV  GISAAIWVV GTACLPFIL RSTDNNKS CFADLYKQM NAVALVGMIT  VAELAGFVP VIIAWCTWK TTISLRQPPM AFQISERQK ALRMVFMCA  VFFICTPYH INFIFTMVK ETIUSCPV RIALYFHPFC LCLASCLL DPILYYFMA  EFRDQLSRHG SSVTRSLMS KEGSSMIG</p>	P	Homo sapiens
543	161293	G Protein- Coupled Receptor Ls161293 [Herpes virus]	NP_042597.1	<p>MATTSATSV NTSSLATTMT TNFTSLTST VTTIASLVPS TNSEDYYDD  LDDVDYEEA PCYKSDTRL AAQVVPALYL LVFLGLLGN ILVVIIRY  MKIKNLTNML LLNLASDLL FLTLFPWMH YIGMYHDWTF GISLCKLLRG  VCYMSLSQV FCILLTVDR YLA VVYAVTA LRFRVTTCGI VTCVCTWFLA  GLLSLPEFFF HGHQDDNGRV QCDPYPEMS TNVWRRHVA KVMLSLLP  LLDMAVCYV IIRLLRRPS KKKYKAIRLI FVMVAYFV WTPYNIVLLL  STFHATLLNL QCALSSNLDL ALLITKTVA THCCINPVY AFVGEKFRRH  LYHFFHTYVA IYLYKYPFL SGDGEKQEP TRI</p>	P	Equine herpesviri s 2
544	177147	Neuromedin K Receptor-Like (NK-4R)	NM_006679	<p>gcgagaacc cgaatgaac cggccacggc ggctcccca cctgcgcgt cctgcggcg gcctgggct cggggcac  gggtcgcc cccatggct cgcgcgcgg gaactgagc gctggccgg gctggggg ggcgcgcgc ggcgcgcga  ggaacctgac cctccccc gcccgcgcgc cgtcccgct cccggccgc cctgcgcgc cccggccgc  gcgcacccgt tctgcagcc gccctggcc gttggcgtct ggtgcgtg ctaggcgc gttggggcg tggcggtgt  cggcaacdc gttgtgtat ggalgtgtt ggccacaag cgtatgcga cgttccaa cctctctc gttgaactgg  ccttcgcga cgcgcgcga acgcgtgct caacttcat taccgctg acggagagtg gttctggc  gccaactat gccgcttca gaacttct cccatccc cgtgtgct cagatcatc tccatgagg ccatcggt  ggacaglac atggccatta ttgacccct gaagccacgg cgtctgcga cggccacgc gatgcatc ggaagcatc  ggatcggc atttactt gatttctc agttctgta ttccaaatc aaagtatg caggccgac tcttctac gttcagggc  cagaaggtc aaggcaacat ttacgtacc acatgctgt cagctgtg gttgtgtt tttctgt ccatgggc atccatca  ccatgttgg aatcagctc tggggaggg agatccacgg agacacatc gacaglac agagagcgt gaaaggcaag  cggaggggtg taaaalga gatcgtt gttgtgtct ttgccatg cttgtggc gttgtggc gttgtggc gttgtggc  tatcagcagc tgaacaggtg gaaalacatc cagcaggtt acctggcgt cttgtggc taltcatc acttactt caccgccatc  caaccalc altactgt gtttgaataa gatttctt gttgtgtt agaggccct cgtgtgct ctttcatc acgttccag  ctacgacag ctggagctca aagccacag cttccacca atgcacaga gtagctata cacatgaca agtatgggt  ccatggcgt ggtattgac tccacagtg ggagacagtc cagttccagt caccagagc agaggagc cagagcga</p>	A	Homo sapiens

[illegible]

545	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	taaataatataaataatcatatgaataaat MASPAGNLSA WPGWGWPPPA ALRNLTSPPA PTASPPAPS WTPSPRPSPA HPFLQPPWAV ALWSLAYGAV VAVAVLGNLV VIWIVLAHKR MRTVTNSFLV NLAFADAAMA ALNALVNFY ALHGEWYFGA NYCRFQNFPP ITAVFASIYS MTAIAVDRYM AIDPLKRL SATATRIVIG SIWLAFLA FPQCLYSKIK VMPGRTLCTV QWPEGSRQHF TYHMIIVLV YCFPLLMGI TYTIVGHTLW GGEIPGDTCD KYQEQLKAKR KVVKMMIIV VFAICWLVPY HIYFILTAIY QQLNRWKYIQ QVYLASFULA MSSTMVNP II YCCLNKRFRG GFKRAFRWCP FIHVSSYDEL ELKATRLHPM RQSSLYTVTR MESMSVVFDSD NGD SARSSH QKRGTTTRDVG SNVCSRRNSK STSTTASFVS SSHMSVEEGS	P	Homo sapiens
546	177168	Cysteiny Leukotriene CYSLT1 Receptor	NM_006639	atgagagaagaa caggaaatc gacagatct tctgacacat gccalgaac tatgaagac ttccgcaatc aagtgatc caccitgtac tctatgaict cgtgttagg cttctggc aatggcttg tgcctatgt cctataaaa acctataca agaagtcagc ctccaagta tacaatgaia atthagcagt agcagaicta cttgtgtgt gcaacagtc tctcgtgtgt gctatattg ttcaaaagg catttgctc tttggtagct tctgtgcg cctagcacc taigtctgt atgtcaacct ctattgtatg alctcttta tgacagccat gagcttttc cgtgtgcatg caattgttt tccagtcag aacatgaat tggtaacaca gaaaaaagcc aggttgtgt gtaggtat ttgatttt gtgatttga ccagttccc attctaatg gccaaaccac aaaaagaiga gaaaaataat accaagtgt ttgagcccc acaagacaat caaacaataa atcattgtt ggctgtgat tatgtgat tttgttgg cttatcat accaagtgt ttgagcccc ctgtacaca atgacatt ttaccitact aaaaaataca atgaaaaaaa aicigtcaag tcaaaaaag gctataggaa tgaatgtgt cgtgacgct gcccttttag tcaatticat gccatcat atcaacgta ccattacct tcaatttta cacaatgaaa ctacaacccig tgatctgt cttagaatgc agaagtcgt ggacalaacc ttgtctcgtg ctgacalcaa ttgtgtctt gacctctcc tatattct ttctgggggt aacttttaga aaaggctgt tacaatcaga aagcatctt tgtccagct gactatgta cccagaaaaa aggcctctt gccagaaaa ggagaagaaa tatgaatgt atag MDETNLTYS SATCHDTIDD FRNQVYSTLY SMISVVGFFG NGFVLVLIK TYHKSAFQV YMINLA VADL LCVCITPLRV VYVHKGIWL FGDLCRLST YALYVNLKCS IFMTAMSF RCIAIVFPVQ NINLVTKKA RFVCVGIWIF VILTSSPFLM AKPQKDEKNN TKCFEPQDN QTKNHVLVLH YVSLFVGFII PFVIIVCYT MIILTLKKS MKKNLSSHKK AIGMIMVVTA AFLVSFMPYH IQRTHLHFL HNETKPCDSV LRMQKSVVIT LSLAASNCFF DPLL YFFSGG NFRKRLSTFR KHSLSSTVTV PRKKASLPEK GEEICKV	A	Homo sapiens
547	177168	Cysteiny Leukotriene CYSLT1 Receptor	NP_006630.1	ccacgctcc gccggctga cgtgtgacc ggacgaggt caggctcgg ctctctcc gctgcagcag ccgctgtcc ggccaccatg ggctggatc cggcccgcc cccctggca ccgctgtct tggcccgcc cccggcccg ccgaccatgc gctggcgcc ccaggggaa accgacccg gccaaaggcc cgtcaagagc aggtctccgg gccggggccc ctccggcgcc ccagctct ggccggcg cgtcccgcc tccggagcc cgtgtgctt cgtggggccat ggagcgcgc ccgcccgcgc ggccgctgaa cgtctgggg cgtctggcg gcgatgcgc ggccggcgcc gctctggcg agctggcc agctggacc gcgtgtcgg ccgctcat ggctgtctc atcgtggca cgtgtgtgg caacgctg gctatgtc cctcgtgg ccctgtgg cgactgagc ctccgaccc agaaacatt ctctgtct aactcgca tctcgact cctcgtgg gccctgtga tccactgta tgaacctac gtagctgac ggctgtgac ctccggcc ggccctgtga agctgtgct gtagtggac taactgtgt gacctctc tgcctaac atcgtgca tcaatgca ccgctctgt tgggtaccc gagcgtct ataccggcc cagcaggtgt acacggcg ggcatgtcg aagatgtct tgggtgggt gctggcttc cgtgtgac gaccagcat cctgagctgg agatgactt ccggggcg ctccatccc gagggccat gctatggca gttcttctac	P	Homo sapiens
548	177191	Histamine H3 Receptor	NM_007232	ccacgctcc gccggctga cgtgtgacc ggacgaggt caggctcgg ctctctcc gctgcagcag ccgctgtcc ggccaccatg ggctggatc cggcccgcc cccctggca ccgctgtct tggcccgcc cccggcccg ccgaccatgc gctggcgcc ccaggggaa accgacccg gccaaaggcc cgtcaagagc aggtctccgg gccggggccc ctccggcgcc ccagctct ggccggcg cgtcccgcc tccggagcc cgtgtgctt cgtggggccat ggagcgcgc ccgcccgcgc ggccgctgaa cgtctgggg cgtctggcg gcgatgcgc ggccggcgcc gctctggcg agctggcc agctggacc gcgtgtcgg ccgctcat ggctgtctc atcgtggca cgtgtgtgg caacgctg gctatgtc cctcgtgg ccctgtgg cgactgagc ctccgaccc agaaacatt ctctgtct aactcgca tctcgact cctcgtgg gccctgtga tccactgta tgaacctac gtagctgac ggctgtgac ctccggcc ggccctgtga agctgtgct gtagtggac taactgtgt gacctctc tgcctaac atcgtgca tcaatgca ccgctctgt tgggtaccc gagcgtct ataccggcc cagcaggtgt acacggcg ggcatgtcg aagatgtct tgggtgggt gctggcttc cgtgtgac gaccagcat cctgagctgg agatgactt ccggggcg ctccatccc gagggccat gctatggca gttcttctac	A	Homo sapiens

[illegible]

551	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	<p>gcgcacacgc cctggggccc ttgccctctt ggccttctta ctgcctgccc gctcgcctgc agtcttcac cttagcgtt atgaacctct actttgcca ggttggttc aaggccaagg tgaagcgtcg gccggagag agccgaggtt tgcctcgtt cggaggggcc ttgtggggg cctcgtctt ctttcgttg gtagacgtgc tgrtgcctt gctctccat cggcgccgac agocctggggc cctcgtctt gtcgcgtcc tggtagcga cctccgttc gctcgtgc cgtctctt tgcctcgtc cctcgtccgc tgcagcgg gcgcccca ctgacacta cctggaggcc aaggtagggc tgcagcacgtc algcccaggt gcttttggg tctcggga gcgcttca ggggttagag</p> <p>MESNLSGLVP AAGLVPALPP AVTLGLTAAY TTYALLFFS VYAQLWLVL</p> <p>YGHKRLSYQT VFALCLLWA ALRITLFSFY FRDTPRANRL GPLPFWLLYC</p> <p>CPVCLQFFTL TLMNLYFAQV VFKAKVKRRP EMSRGLLA VR GAFVGASLLF</p> <p>LLVNVLCVAVL SHRRAPQWAL LLVRVLVSDS LFVICALSLA ACLCLVASGR</p> <p>PPLASTWRPR</p>	P	Homo sapiens
552	180956	Lysophosphatidic Acid Receptor Edg7	NM_012152	<p>ctctttaaa ttctttta ggaattcac ttcttcca caatgaalga gttgcactat gacaagcaca tggactttt ttataatagg agcaacactc alactgtcga tgcctggaca ggaacaaagc ttgtgtgt ttgtgtgtt gggacgttt tgcctgtt tatttttt tctaatctc tggctatgc ggcagtgatc aaaaacagaa aatttcatt ccccttctac taccgttgc ctatattagc tgcctccgat ttctcgtc gaaatgocct tttattcgt algtttaaca caggccacgt ttcaaaaact ttgacttca accgctgtt tctccgtcag gggctctgg acagtagctt gactgtctc ctaccaact tgcctgttat cgcctggag aggcacalgt caatcalgag gctcgggtc calagcaacc tgaacaaaaa gagggtgaca ctgctcatt tgcctgtc tgcctgtc gggccalcgc attttatgg gggcggtccc cacactgggc tggaaatgcc tctgcaacat ctctccctgc tctccctgc ccccaattta cagcaggagt taccttgttt tctggacagt gtccaaccic alggccttc tcatcaltgt tgggtgttac ctgcgcat ct agtgcact caagaggaaa accaactgt tgcctcga tacaagtggg tccalcagcc gccggaggag acccalgaag ctatagaaga cgttgtatgc tgtctagggg gcgttttgg latcgtggac cccggggcgc gttgtctgc tctcgcagc cctgaactgc aggcaggtgt gctgtagca tgrtzaaagg tggctctgc tgcctgcgt ctcaactcc gctgaacc ccalactia ctctacaag gacgaggaca tgtatggcac catgaagaag atgctcgt gctcttca ggaagaacca ggaaggcgtc cctcgcgt cccctcaca gtctcagca ggaaggcac aggcagccag tatalagggg alagtattag ccaagggtga gctcgaata aagcacttc claaactc galgctctc ggccacca ggtgagact gcttagg</p> <p>MNECHYDKHM DFYNRSNID TVDDWTGTL VVLCVGTFF CLFIFFSNL</p> <p>VIAA VIKNRK FHFFYYLLA NLAAADFFAG IAYVFLMFNT GPVSKILTVN</p> <p>RWFLRQGLLD SSLTASLTNL LVIAVERHMS IMRMRVHSNL TKKRVTLLIL</p> <p>LVWAIAIFMG AVPTLGWNCL CNISACSSLA PIYSRYL VF WTVSNLMAFL</p> <p>IMVVVYLRV VYVKKRTNVL SPHTSGSISR RRTPMKLMKT VMTVLGAFVV</p> <p>CWTPGLVLL LDGLNCRQCQ VQHVKRWFLL LALLNSVNP IYSYKDEDM</p> <p>YGTMKKMICC FSQENFERRP SRPSTVLSR SDTGSQYIED SISQGAVCNK STS</p> <p>algggccccc ggcagcgt gctggcgggt ctctggga tggactggc cgtggcgtc ctatcaacg cactgggt gctttgtgc gcctacagc ctgactccg cactcagcc tcaaggctcc tctgggtga tctgtctc gggcactgc tgcctggcgc gctggacal ccttcacgc tgcctgggt galgcgggg cggacacctg cggcgccgg cgcaltgocaa gtcattggct tctggcac ctctcggcg tcaacgcgg cgttgagcgt ggcggcgtc agcgagac accgtggcgtc agtgggctc ccactgcgt agccgggacg cctcggacgg cgtatggcg gcttgctgt gggctgtgccc tggggacagt cgtggocct ctacggcgt gacttggct gctgtggct tgggtacagc agcgctcgc cgtcctgtc gctggcgtc cggcccgagc ctgagctcc ggccttgcga gactacccg ccacgtcca tgcgtgggg tctgtgtcgc cgtcggcgt gctcgtc accctgcc aggtgacgg ggtggcagc agacactgc agcgaltgga caccgtcac algaaaggc</p>	A	Homo sapiens
553	180956	Lysophosphatidic Acid Receptor Edg7	NP_036284.1	<p>gcgcacacgc cctggggccc ttgccctctt ggccttctta ctgcctgccc gctcgcctgc agtcttcac cttagcgtt atgaacctct actttgcca ggttggttc aaggccaagg tgaagcgtcg gccggagag agccgaggtt tgcctcgtt cggaggggcc ttgtggggg cctcgtctt ctttcgttg gtagacgtgc tgrtgcctt gctctccat cggcgccgac agocctggggc cctcgtctt gtcgcgtcc tggtagcga cctccgttc gctcgtgc cgtctctt tgcctcgtc cctcgtccgc tgcagcgg gcgcccca ctgacacta cctggaggcc aaggtagggc tgcagcacgtc algcccaggt gcttttggg tctcggga gcgcttca ggggttagag</p> <p>MESNLSGLVP AAGLVPALPP AVTLGLTAAY TTYALLFFS VYAQLWLVL</p> <p>YGHKRLSYQT VFALCLLWA ALRITLFSFY FRDTPRANRL GPLPFWLLYC</p> <p>CPVCLQFFTL TLMNLYFAQV VFKAKVKRRP EMSRGLLA VR GAFVGASLLF</p> <p>LLVNVLCVAVL SHRRAPQWAL LLVRVLVSDS LFVICALSLA ACLCLVASGR</p> <p>PPLASTWRPR</p>	P	Homo sapiens
554	189873	G Protein-Coupled Receptor GPR78	AF411107	<p>ctctttaaa ttctttta ggaattcac ttcttcca caatgaalga gttgcactat gacaagcaca tggactttt ttataatagg agcaacactc alactgtcga tgcctggaca ggaacaaagc ttgtgtgt ttgtgtgtt gggacgttt tgcctgtt tatttttt tctaatctc tggctatgc ggcagtgatc aaaaacagaa aatttcatt ccccttctac taccgttgc ctatattagc tgcctccgat ttctcgtc gaaatgocct tttattcgt algtttaaca caggccacgt ttcaaaaact ttgacttca accgctgtt tctccgtcag gggctctgg acagtagctt gactgtctc ctaccaact tgcctgttat cgcctggag aggcacalgt caatcalgag gctcgggtc calagcaacc tgaacaaaaa gagggtgaca ctgctcatt tgcctgtc tgcctgtc gggccalcgc attttatgg gggcggtccc cacactgggc tggaaatgcc tctgcaacat ctctccctgc tctccctgc ccccaattta cagcaggagt taccttgttt tctggacagt gtccaaccic alggccttc tcatcaltgt tgggtgttac ctgcgcat ct agtgcact caagaggaaa accaactgt tgcctcga tacaagtggg tccalcagcc gccggaggag acccalgaag ctatagaaga cgttgtatgc tgtctagggg gcgttttgg latcgtggac cccggggcgc gttgtctgc tctcgcagc cctgaactgc aggcaggtgt gctgtagca tgrtzaaagg tggctctgc tgcctgcgt ctcaactcc gctgaacc ccalactia ctctacaag gacgaggaca tgtatggcac catgaagaag atgctcgt gctcttca ggaagaacca ggaaggcgtc cctcgcgt cccctcaca gtctcagca ggaaggcac aggcagccag tatalagggg alagtattag ccaagggtga gctcgaata aagcacttc claaactc galgctctc ggccacca ggtgagact gcttagg</p> <p>MNECHYDKHM DFYNRSNID TVDDWTGTL VVLCVGTFF CLFIFFSNL</p> <p>VIAA VIKNRK FHFFYYLLA NLAAADFFAG IAYVFLMFNT GPVSKILTVN</p> <p>RWFLRQGLLD SSLTASLTNL LVIAVERHMS IMRMRVHSNL TKKRVTLLIL</p> <p>LVWAIAIFMG AVPTLGWNCL CNISACSSLA PIYSRYL VF WTVSNLMAFL</p> <p>IMVVVYLRV VYVKKRTNVL SPHTSGSISR RRTPMKLMKT VMTVLGAFVV</p> <p>CWTPGLVLL LDGLNCRQCQ VQHVKRWFLL LALLNSVNP IYSYKDEDM</p> <p>YGTMKKMICC FSQENFERRP SRPSTVLSR SDTGSQYIED SISQGAVCNK STS</p> <p>algggccccc ggcagcgt gctggcgggt ctctggga tggactggc cgtggcgtc ctatcaacg cactgggt gctttgtgc gcctacagc ctgactccg cactcagcc tcaaggctcc tctgggtga tctgtctc gggcactgc tgcctggcgc gctggacal ccttcacgc tgcctgggt galgcgggg cggacacctg cggcgccgg cgcaltgocaa gtcattggct tctggcac ctctcggcg tcaacgcgg cgttgagcgt ggcggcgtc agcgagac accgtggcgtc agtgggctc ccactgcgt agccgggacg cctcggacgg cgtatggcg gcttgctgt gggctgtgccc tggggacagt cgtggocct ctacggcgt gacttggct gctgtggct tgggtacagc agcgctcgc cgtcctgtc gctggcgtc cggcccgagc ctgagctcc ggccttgcga gactacccg ccacgtcca tgcgtgggg tctgtgtcgc cgtcggcgt gctcgtc accctgcc aggtgacgg ggtggcagc agacactgc agcgaltgga caccgtcac algaaaggc</p>	A	Homo sapiens

555	189873	G Protein-Coupled Receptor GPR78	CAC34041.1	<p>tgccggtgct cgcgcaccctg caocccagtg tgcggcacagg ctgcctcalt cagcagaagc ggcgcgcgcca ccgcgcacc</p> <p>aggaagattg gcaitgctat tgcgacctc ctactgct tggcccgla tgcaltgacc aggcitggcgg agctcgtgccc</p> <p>cttgcacc gigaacgccc agtggggcat cctcagcaag tgcctgacct acagcaaggc ggtggccgac ccgttcacgt</p> <p>acitctgct ccgcggccgg tccgccaag tccggccgg catggcgac cggcgtcgtga agagaacccc ggcgccagca</p> <p>tcacccatg acagctctt ggalgtggcc ggalgtggc accagctgct gaagagaacc ccgcgcgccag cgtccacca</p> <p>caacggctct gtagacacag agaatgctc ctgcctgag cagacacact ga</p> <p>MGPGEALLAG LLVMVLAVAL LSNALVLLCC AYSaelRTRA SGVLLVNL SL</p> <p>GHLILAALDM PFTLLGVMRG RTPSAPGACQ VIGFLDTFLA SNAALSVAAL</p> <p>SADQWLA VGF PLRYAGRLRP RYAGLLGCA WQSLAFSGA ALGCSWLGY S</p> <p>SAFASCSLRL PEPERPRFA AFTATLHVG FVLPLAVLCL TSLQVHRVAR</p> <p>RHCQRMDTVT MKALALLADL HPSVRQRCLIQKRRRRHRAT RKIGIAIATF</p> <p>LICFAPYVMT RLAE LVPFT VNAQWGILSK CLTYSKAVAD PFTYSLRRP</p> <p>FRQVLAGMVH RLLKRTPRPA STHDSSLDVA GMVHQLLKRT PRPASTHNGS</p> <p>VDTENDSCLQ QTH</p>	P	Homo sapiens
556	189874	Neuromedin U Receptor 2	NM_020167	<p>atggaaaaac ttcagaatgc ttctggalc taccagcaga aactagaaga tccattccag aaacacctga acagaccga</p> <p>ggagatcttg gcttctct ggcgacctcg gcgcagccac ttcttctcc ccgtgctgt ggtgtatgtg ccaattttg tgggggggt</p> <p>cattggcaat gtcctgggt gcttgggtat tctgcagcac cagggtatga agacgcccac caactactac ctctcagcc</p> <p>tggcggtctc tgacctctg gctcgtcc ttggatgccc cctggagggtc taigatgtg ggcgcaacta cctcttttg</p> <p>ttcgggccc tgggtctgcta ctcaagagc ggcctcttg agaccgtgtg ctctgctcc atctcagca tcaacacct</p> <p>cagcgtggag cgtctagtg ccacttaca ccgttccgc gccaaactgc agagcacccg gcgcggggcc ctacggatcc</p> <p>tgggcatgt cgggggtctc tccgtgctt ttccctgccc caacacagc atccatggca tcaagtcca ctacttccc</p> <p>aalgggtccc tgggtccagg ttggccaacc tgtacggta tcaagcccat gtagctatc aatttcalca tccaggtcac ctcttcta</p> <p>ttctacctcc tcccatgac tgcaltcagt gtccttact acctatggc actcagacta agaaagaca aaltcttga ggcagatga</p> <p>gggaatgcaa atattcaag accctgcaga aatatgca acaagatgt gttgtcttg gcttagtgt ttgtatctg tggggccc</p> <p>ttccatgt accgactct ctacgttt gggaggagt ggagtgaatc cctggctgtg tgttcaacc tcttccatgt ggtgtcaggt</p> <p>gtcttctt acctgagctc agctgtcaac ccattatct alaaactat gtcctgccc ttccaggcag cattocagaa tgtgtctct</p> <p>ttttccaca aacagtgga ctccagcat gaocacagt tgcacctgc ccagggaac atcttctga cagaatgca</p> <p>cttggggag ctgaccgaag atatgggtcc ccaattcca tgcagtgcat ccatgcaca ctctcactc ccaacggcc</p> <p>tcttaga acagatga agaaacaact atcaagctt ccaattaac aaaactga</p> <p>MEKLQNASWI YQKLEDPPFQ KHLNSTEEYL AFLCGPRRSH FFLPVSVVVY</p> <p>PIFVVGIGN VL VCLVILQH QAMKTPNTY LFS LAVSDLL VLLGMPLEV</p> <p>YEMWRNYPFL FGPVGCYFKT ALFETVCFAS ILSITTVSVE RYVAILHPFR</p> <p>AKLQSTRRA LRILGIVWGF SVLFLPNTS IHGKFHYFP NGSLVPGSAT</p> <p>CTVIKPMWY NFIIQVTSFL FYLLPMTVIS VLYYLMALRL KDKSLEADE</p> <p>GNANIQRPCR KSVNKMFLV VLVEAICWAP FHIDRLFFSF VEEWSESLAA</p> <p>VFNLVHVVSQ VFFYLSA VN PIYNLLSRR FQAAFNVIS SFHKQWHSQH</p> <p>DPQLPPAQRN IFLTECHFVE LTEDIGPQFP CQSSMHNSHL PTALSSEQMS</p> <p>RTNYQSFHFN KT</p>	A	Homo sapiens
557	189874	Neuromedin U Receptor 2	NP_064552.1	<p>tgctgaga acagatga agaaacaact atcaagctt ccaattaac aaaactga</p> <p>MEKLQNASWI YQKLEDPPFQ KHLNSTEEYL AFLCGPRRSH FFLPVSVVVY</p> <p>PIFVVGIGN VL VCLVILQH QAMKTPNTY LFS LAVSDLL VLLGMPLEV</p> <p>YEMWRNYPFL FGPVGCYFKT ALFETVCFAS ILSITTVSVE RYVAILHPFR</p> <p>AKLQSTRRA LRILGIVWGF SVLFLPNTS IHGKFHYFP NGSLVPGSAT</p> <p>CTVIKPMWY NFIIQVTSFL FYLLPMTVIS VLYYLMALRL KDKSLEADE</p> <p>GNANIQRPCR KSVNKMFLV VLVEAICWAP FHIDRLFFSF VEEWSESLAA</p> <p>VFNLVHVVSQ VFFYLSA VN PIYNLLSRR FQAAFNVIS SFHKQWHSQH</p> <p>DPQLPPAQRN IFLTECHFVE LTEDIGPQFP CQSSMHNSHL PTALSSEQMS</p> <p>RTNYQSFHFN KT</p>	P	Homo sapiens
558	189884	G Protein-Coupled Receptor	LG94108	<p>atgttgacag ctgccttgc agacttaac tccagcaga tgaatgtgc cttgtctac ctccattg ccgagaggta cctgcctct</p> <p>gattocagg actggagaac calcatccc gctctctgg tggctgtctg ccttggtggc ttcgtggga acctgtgtg</p>	A	Homo sapiens

Ls189884					<p>gattggcatic clcttcaca atgcttgggaa aggaagacca tccatgatcc actcccgat tctgaatcic agccctggcig atctctccct cctgctgttt tctgaccata tccgagctac ggcgtactcc aaaagtggtt gggtatcagg cctgtttgtc tgcaggtcct ctgacttggt latcacaca tgcattggcag ccaagagcct gacaatggtt gctgtggcca aagtatgctt calgtatgca agtggaccag ccaagcaagt gtagtatcac aactacaca tctggtcagt gctgtggccc atctggacig tggctagcct gtiaccctcig ccggaatgg tctttagcac calcaggcat calgaaggig tggaaatgig cctctgggat gtaaccagcig tggcigaaga gttatgctg algtttgga agctctacc actctggca tttggcttc cattatit tggcagctt tattcttggg agcttata ccaatgtaa aaacgaggaa ctaagactca aaatctaga aaccagatc gctcaagca agtcacagtg atgctgctga gcattggcat calctctgct cttctggc tcccgaaig ggttagcttgg ctgtgggtat ggcattcigaa ggcctgcaggc ccggcccccac cacaagggtt calagccctg tctcaagctc tgaatttc calctctca gcaatcttc tcaitttct tgtatgctg gaagagtca gggaaaggctt gaaaggigta tggaaatgga tgaatacaca aaaaactcca actgctcag agtctcagga aaacacagct ggcactcag agggctctcc tgaacagggtt ccaatccag aatccccagc alccatacca gaaaaagga aaccagctc tccctctct ggcaaaaggga aaactgagaa ggcagagatt ccaatcttc ctgacgtaga gcagttttgg calgagagggg acacagctcc ttctgtacag gacaaagacc ctatccctc ggaacatgaa galcaagaga caggggaggg tgttaaatag</p>	P	Homo sapiens
559	189884	ENSMPT1140 G Protein-Coupled Receptor 67 Ls189884	MLAAAFADSN SSSMNVSAF LHFAGGYLPS DSQDWRTIIP ALLVAVCLVG FVGNLCVIGI LLHNAWKGP SMHSLILNL SLADLSLLF SAPIRATAYS KSVWDLGWVF CKSSDWFHT CMAAKSLTV VVAKVCFMYA SDPAKQVSIH NYTIWSVLVA IWTVASLLPL PEWFFSTRH HEGVEMCLVD VPAVAEEFMS MFGKLYPLLA FGLPLFFASF YFWRAYDQCK KRGTKTQNLN NQIRSKQVTV MLLSIAISA LLWLPEWVAW LWVWHLKAAG PAPQGFIAL SQVLMFSISS ANPLIFVMS EEFREGLKGV WKWMITKKPP TVSESQETPA GNSEGLPDKV PSPESPASIP EKEKPSPSS GK GKTEKAEI PILPDVEQFW HERDTPVSVQ DNDPIPWEHE DQETGEGV	P	Homo sapiens		
560	189895	NM_031936 G Protein-Coupled Receptor GPR61	atggagctct caccalccc ccagtcacaa ggggaactct ccactttggg gagggtccct caaaccocag gtccctctac tgccagtggg gtcccggagg tggggctagg ggaatgtct tggaaatcig tggccctct ctcagctc ctgttgact tgactgctgt ggcctggcaat gccgcctgga tggccgtgat cgccaagacg cctgcccctc gaaaatttgt ctgtcttc cactctgccc tgggtggact gctggctgccc ctgaccctca tggccctggc calgtctcc agccctgccc tcttgacca cgccctctt ggggagggtgg cctggccct ctactgttt ctgagcgtgt gctttgtcag cctggccatc ctctgggt gaggcaca tgtggagcgc tactattacg tagtccaccc calgcgcctac gagggtgcga tgaagctggg gctgggtggc tctgtgctgg tgggtgtgtg ggtgaaggcc ttggccalgg ctctgtgccc agtgttggga agggctctct gggagggaggg agctccaggt gtcccccac actgtact ctagtggagc cagatgctt actgcccagct tttttgggt gctttgctg tctttact tctttgccc ctgtctca tacttctgt ctactgagc algtccagag tggcccgctt ggcctggcalt ctagacggggc cgcctggccc gtggatggag acacccggc aacgcctcga atctcagc agccctcga cgalgtctac cagctggggg gccccaga ccacccaca ccggacgttt gggggaggga aagcagcagt ggtctctc gctgtgggg gacagttct gctctgtgg ttggcctact tctctcca cctctalgtt gcccgtagtg ctacgccc atcaactggg caggttggga gttgtgtcac ctggatggc tactttgt tcacttcaa cctttctc tatggatgic tcaaccggca galcgggggg ggcctcagca agcagtttgt ctgtcttc aagccagctc caggaggga gctgaggctg cctagccggg agggctccat tggaggagaa tcttgcagt tcttcaagg gactggctgt cctctgagt cctgggttc ccgaccccta ccagggccca agcagggagcc accgtgtgt gacttcgaa tccaggccag atag	A	Homo sapiens		
561	189895	NP_114142.1 G Protein-Coupled Receptor	MESSPIQSS GNSSTLGRVP QTPGPSTASG VPEVGLRDVA SESVALFFML	P	Homo		

sapiens

LLDLTAVAGN AAVMAVIKTPALRKFFVVFHCLVDLLAA LTLMLPLA  
SPALFDHALFGEVACRLYLF LSVCFVSLAI LSVSAINVER YYYVHVHPMRY  
EVRMTLGLVA SVLVGVWVKA LAMASVPVLG RVSWEAGAPS VPHCSLQWS  
HSAYCQLFVV VFAVLYFLP LLLILLVYCS MFRVARVAAM PDGPLPTWME  
TPRQRSELS SRSTMVTSSG APQTTPHRTF GGGKAAVVLL AVGGQFLLCW  
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ELSKQFVCFK KPAPEEELRL PSREGSEEN FLQLQGTGC PSESWVSRPL PSPKQEP  
PAPVDFRIQAR

Homo sapiens

A

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MESGLLRPAP VSEVIVLHYN YTGKLRGARY QGAGLRADA VVCLAVCAFI  
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TLAMAAAAG VSLLLGLLP LGWNLGRDL ACSTVLPYA KAYVLCVLA  
FVGILAAICA LYARIYQVR ANARRLPAR GTAGTTSTRA RRPRLSLAL  
RTL SVVLLAF VACWGPLFL LLDVACPAR TCPVLLQADP FLGLAMANS  
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Homo sapiens

P

Coupled Receptor  
GPR61

562 189900 Sphingolipid Receptor Edg8 NM\_030760

563 189900 Sphingolipid Receptor Edg8 NP\_110387.1

564 189901 G Protein-Coupled Receptor Ls189901 (HEOADS4) LG94029



565	189901	G Protein- Coupled Receptor Ls189901 (HEOAD54)	CAC38933.1	<p>ggccaccgg gcagctggcc ccagggaagc acggctcagc acgtggggg gcgcaccac ctccaggag cggttgagtg cgatggctgt gaggaagaca acgtggggcgc tgcgggttgtt ggacagcatg aagagggtga ctttgaggc agcagcccca aagcgccagg tctatggag gaggtagtag tccagcgga gggcgagggtt gcctgacagg aggaagtcag cggccaccag gcigaccagg aacaccgtgt tggaggcca gggcgcggtg tggatgcaga agatgaagag ggccaacatg ttccccaaca ggccaggac aaactcagg gccaggatg ggcaggga ggccagacac agcagggaag aggtgggggtg gcaggggccct ccaggagacc cccaccagt ggtaaggg</p> <p>MELHNLSSPS PSLSSSVLPP SFSPSPSSAP SAFTTVGGSS GGPCHPTSS LVSFLAPIL P ALEFVLGLVG NSLALFICI HTRPWTSNTV FLVSLVAADF LLISNLPLRV DYLLHETWR FGAAACKVNL FMLSTNRTAS VFELTAIALN RYLKVVQPHH VLSRASVGAA ARVAGGLWVG ILLNGHLL STFGSPCLS YRVGTPKSAS LRWHQALYLL EFFLPLALIL FAIVSIGLTI RNRGLGGQAG PQRAMRVLAM VVAVYTICFL PSIFGMASM VAFWLSACRS LDLCQLFHG SLAFTYLSNV LDPVLYCFSS PNFLHQSRAL LGLTRGRQP VSDESSYQPS RQWRYREASR KAEALGKLV QGEVSLEKEG SSQG</p>	Homo sapiens
566	189904	Purinergic Receptor P2U2 (GPR91)	NM_033050	<p>gggtatggt taactcagca gaatttgtt aacaactacg acatgctggg gatcaggca tggaaigcaa ctfgcaaaaa ctggcggca gcaggcgctg ccttggaana gtiactact tcaattttt atggatga gttcgttg gtagccttg gaaataccat tgtgtttac ggctacatct tctctcgaa gaactggaa agcaglaala ttactctt taactctct gtcctgact tagctttct gtgcacctc cccatgctga taaggagtia tggcaatgga aactggatat atggagactg gctcgcata agcaacogat atgtcttca tggcaactc lalaccagca ttctttct cactttatc agcalatgac gatcctgat aattaagtat ccttccgag aacactctt gcaaaagaaa gagtttgta tttaactc ctggccatt ttggctttag taactlaga gttactacc atactccc ttataaacc tgtataact gacaatgga ccaactgaa tgaattgca agtctggag acccaacia caactcatt tacacalgt gtciaact gtgggggtc ctattctc ttttgtat ggtttctt tattacaaga ttgctctt ctaaaagcag aggaataggc aggtgtctac tgcctgccc ctgaaagc ctctcaact ggicalcag gcagtgtaa tctctctgt gcttttaca cctatcacg tcalcgga tgtgaggatc gcttcagccc tggggagtg gaagcagat cagtgcactc aggtcgtcat caactcctt tacatttga cagggcctt ggctttctg aacagtgtca tcaacctgt ctctattt cttttggag atcactcag ggacalgtc atgaatcaac tgaagacaaa ctcaatcc cttaactct ttacagatg ggctcagaa ctctactt cattcagaga aaagtgaagg gcttggaaa cagattgtc tacagatgaa tctgaagcc agttacagt tgccttaact calagacatc aatcagagag tgtcacagat ttaccttga tctaaagaca agttgtacc agagtatg aaaaagaatgg gacgacaaga atgtactgtt ttctctct aagaattgaa aggagtga ctgcctatg ttggcag taaactcaaa atactagga glaalaggct ttctaatca gtgcaaaaat ggaaatala taagcaaca agttgtctgc attgtatcac tggcagatt gtaaaaaaaa aaaaaaaa</p> <p>MAWNATCKNW LAEEALEKY YLSIFYGIEF VVGVLGNTIV VYGYFSLKN P WNSSNYLNL LSVSDLFLC TLPMLRSYA NGNWTYGDVL CINSRYVLHA NLVTSILFT FISIDRYLII KYPFREHLLQ KKEFALLISL AIWVLVLEL LPILPLNPV ITDNGTTCND FASSGDPNYN LIYSMLCLTL GLPLFVMC FFYKIALFL KQRNRQVATA LPLEKPLNV IMAVVIFSVL FPTYHVMRNV RIASRLGSWK QYQCTQVWIN SFYIVTRPLA FLNSVINPVF YFLLDHFRD MLMNQLRHNF KSLTSFSRWA HELLSFREK</p>	Homo sapiens
568	189920	G Protein- Coupled Receptor GPR63 (PSP24)	NM_030784	<p>tggagcaatg ctccctgggc tctccggc gcgcccgcgc gctgccctc gctlgaggca aaaggactct tgtggaagat A ggaactcatt giccatitc cagaatgat ttcaagccc alcaatggga cctgalactg ctgtctgtg ttgaatgct tgaagaactc ctgactct gcttgcatc tcatctac tgaaccatg gctctcggc cagtgtgac tgcgttccat accgggacat ccaacacaac</p>	Homo sapiens

(beta)

atttgctgig tatgaaaca cctacatgaa tatacac cctccaccat tccagcatcc tgacctcag ccatgctta gatatagtt  
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P Homo sapiens

569 189920 G Protein- NP\_110411.1  
 Coupled Receptor  
 GPR63 (PSP24  
 beta)

MVFSAVLTAF HTGTSNTTFV VYENTYMNIT LPPPFQHPDL SPLRYSFET  
 MAPTGLSLT VNSTAVPTP AAFKSLNPL QITLSAIMIF ILFVSFLGNL  
 VVCLMVYQKA AMRSAINLL ASLAFADMLL AVLNMFPALV TILTTRWIFG  
 KFFCRYSAMF FWLFVIEGVA ILLISIDRF LIIVQRQDKL NPYRAKVLIA VSWATSCVA  
 FPLAVGNPDL QIPSRAPQCV FGYYTNPYQ AYVILSLIS FFIFLVILY SFGMLNLT  
 HNALRIHSYP EGICLSQASK LGLMSLQRPF QMSIDMGFKT RAFTTILF  
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 YYWRKKFHD ACLDMMPKSF KFLPQLPGHT KRRIRPSAVY VCGEHRTVV

A Homo sapiens

570 189945 AK027843  
 G Protein-  
 Coupled Receptor  
 Dj287g14.2

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Homo sapiens

Homo sapiens

189945 G Protein-Coupled Receptor Dj287g14.2 BAB55406

571

190026 G Protein-Coupled Receptor JEG18 NM\_032553

572

573	190026	G Protein- Coupled Receptor JEG18	NP_115942.1	MPANYTCTRP DGDNTDFRYF IYAVTYTVL VPGLIGNILA LWVFGYMKKE TKRAVIFMIN LAIADLLQVL SLPLRIFYYL NHDWPFPGGL CMFCFYLYKYV NMYASIYFLV CISVRRFWFL MYPRFRHDCQ QKYDLYISIA GWLIICLACV LFPLLRSTDD TSGNRITKCFV DLPTRNVNLA QSVVMMTIGE LIGFVTPLLI VLYCTWKTVL SLQDKYPMAQ DLGEKQALK MILTCAGVEL ICFAPYHFSF PLDFLVKSNE IKSLARRVILFHSVALCL ASLNSCLDPV IYFYSTNEFR RRLSRQDLHD SIQLHAKSFV SNHTASTMTP ELC	P	Homo sapiens
574	190031	G Protein- Coupled Receptor VLGR1	AF055084	attactglat atglatglat tcagccgiga ttccaaagg ttactttat gacagcatc ttctgattc ctacagttt attacttcc cattgcccaa gtttagaac ttatattag ttggcttc giacaggcac cactcatigg gagcaacaca gaaatcgtt tcaaaacatc atttcaggaa aagaagaata tttagcgtt gagatcgtt aaaaagtatg cagttactta tagaactaag tttagaggagc taaggagatc tttaattca tgcatagcaa ttatgattt ttgttttt ttatatttt ttgttttt ttgttttt ttgttttt ttgttttt ttgttttt ttgttttt agaaaalggg ctccagatag atcaacttcc tgaataggaa aacalcacca ttgttcgat cataataatg aaaaalggaa acgcagaagg catcatigaa ttgacccaa agtatatcgc ctccgaagtg gaggaagagtg ttggcctgat calgatcca gtggaggagc tacatggaaac ttatggctat gtgacagctg atttacttc tcaagcttcc tctgccagtc ccggagggtt tgaattacat ttgcattggca gtacagtcac ctttcagcat gggcaaaact taagtttat aaatalctoc alcattgat acaatgaag tgaatttgag gagccattg aaatttact cactggagct actggaggag cggctcttgg gcgcaccta gtgagcagaa tcaatagc taagagtgac tctccttg gagttalaag gtttcaat caaagcaaaa ttctatgc taatccaat tccacaatga ttatcact gggtctggag cggactggag gactcttggg agagattcag gtgaactggg agacagtagg accaaact caagaagcct tactgccaca gaalagagac atggcagacc cagttagcgg gttgttctat ttggagagag gagaaggagg agttagaao ataattctga caatctatcc tcatgagaa atgaagtg aagagacat cattataa ctctatctg tgaaggaga agctaaatta gactocagag ctaaaagatg tacaatacc alacaagagt ttgtgaccc aatggaggt gttaggtttg ctctgaaac ttgtctaaag aagactatt cagagcctct ggccttgaa gggccctgc tcaatcct ctgttcaga agagtcaagg gcaccttgg agagattatg gttacttgg aatlaagtag tgaattgac attactgag acttttcc caccagtgga ttittacca ttgtctag agagagtgaa gctagcttg atgtcatt gctaccagat gaggtacttg agatagagga agatlatg atccagctg ttctgtaga gggaggagcc gaactggatc tggagagag tatcacatgg ttctgttt atgcaatga tgaaccacat ggagtattg ccctgtatc ggalcggcag tcaactta tgggcagaa cctattaga tcatcaaaa ttaacatac ccgcttgc tggacattg gagatggc tgttggctt cgaatalcat cggatcalaa agacagccg atgttaaccg aaaaagcaga gaggcagctg gtgtcaag atggggcac alataagtg gacttggc caataaagaa tcaagcttc ctatcactg gcttaatt cacttgcaa ctgtgtactg tgaactgt cgggtggagt ttctatggaa tggcaacal tctcaggaa gcaaaatcig ctgtctoc agtctgag aaagcggca attcaggt cggattgaa tccactgt tcaactat gaacatct gctggcaca gccacgtat gattclag agagacat atggagctt ctggggcc tggaccacig gatatgctc tgggttagaa attcgtgat tcatgtgt tggcaacatg acccaacac tggggagcct ttacttcc cactgtgac aagggaaagg agtttctg tggagctt ctggccctg	A	Homo sapiens

[illegible]

575	190031	G Protein- Coupled Receptor VLGR1	AAD55586.1	<p>ggaggactac aca1ggccia cagacacitc 1ggat1ggg tictt1gtt caitt1caac agt1cgagg gactt1agt tt1cat1gtt</p> <p>tatt1catt1 lacacaacca aat1gt1tgc cct1a1gaag ccagttacac 1t1ggaat1g aat1ggc1ac ct1ggaccag cacagcc1tt</p> <p>tt1acgcoog ggagt1ggaat gcc1ct1gtc1 ggagg1gaaa 1cagcaagtc caccagaat1 ct1atcggt1g ct1atggagg1a</p> <p>gg1tgcac1t gact1ggaga g1agcat1c1t1 ccaacagggc ag1caggcca gcc1t1gatt1 aaagccaagt1 ccacaaa1tg</p> <p>gagccaagt1 ccc1t1c1t1 ggaggat1g gccaggg1c act1gat1g1c gat1ggagg1t cccagga1gt1 1gat1gatt1a</p> <p>at1tt1gcat1 ta1aaac1gg 1gt1ggt1c1c ag1t1cag1g at1aat1ga1c 1gt1tcaag1c agcca1ggagg1 gggggcac1t1</p> <p>gact1gact1c cagat1c1gg ag1c1cagg1g gal1cccat1c gccagac1c acc1t1ag1ca cct1cact1aac cat1t1cag1c1g</p> <p>agc1acact1t1 calat1t1g1a 1cagct1t1g 1gct1aaact1 c1ct1aag1t1c at1ccact1gt1 g1aat1agg1a cct1g1gaat1 g1ac1ggag1g</p> <p>at1ta1acaa acc1t1gatt1g 1g1att1gga g1ataa1t1a ct1gat1g1at1 g1t1ac1t1gaa aat1t1c1g1c 1ataag1aaa1g g1ggag1cag</p> <p>tt1gt1at1cag 1taat1agg1at1 g1t1cat1at1c caagga1att1 ag1t1gt1tt1 1taat1cat1cc 1ata1gg1a1a acat1gt1t1a 1a1gaag1a1a</p> <p>1aat1caat1aa agc1aa1ag1a1a 1ct1</p> <p>MQLCIFCCCC ILFYFDLYDF GRGYDFTIQE NGLQIDQPPE IGNISIVRII IMKNDNAEGI P Homo sapiens</p> <p>IEFDPKYTAf EVEEDVGLIM IPVVRLHGTy GYVTADfISQ SSSASPGGVD</p> <p>YLHGSTVTF QHQGNLSFIN ISIDDNESE FEEPIELLT GATGGAVLGR HLVSRIIAK</p> <p>SDSPFGVIRF LNQSKISIAN PNSTMILSLV LERTGGLLGE IQVNWETVGP</p> <p>NSQEALLPON RDIADPVSLG FYFGE GEGGV RTILITYPH EEIEVEETFI IKLHLVKGEA</p> <p>KLDSRAKDVLT IQEFGDPN GVVQFAPETL SKKTYSEPLA LEGPLLITFF</p> <p>VRRVKGTfGE IMVYWELSS EFDITEDFLST SGFFTIADGE SEASFDVHLL PDEVPEIEED</p> <p>YVIQLVSVEG GAELDLEKSI TWFSVYANDD PHGVFALYSD RQSLIGQNLR IRSIQNITR</p> <p>LAGTFGDVAV GLRISSDHKE QPIVTENAER QL VVKD GATY KVDVVPK1NQ</p> <p>VFLSLGSNFT LQLVTVM1VG GRFYGMPTIL QEAKSAVL1PV SEKAANSQVG</p> <p>FESTAFQLMN ITAGTSHVMI SRRGTYGALS VAWTTGYAPG LEIPEFIVVG</p> <p>NMTPTLGSLS FSHGEQRKGV FLWTFPSGW PEAFLVHLSG VQSSAPGGAQ</p> <p>LRSGFIVAEI EPMGVFQFST SSRNI1VED TQMRLHVQR LFGFHSDLIK VSYQTTAGSA</p> <p>KPLEDFEPVQ NGELFFQKfQ TEVDfEITII NDQLSEIEEF FYN1LTSVEI RGLQKFDVNW</p> <p>SPRLNLDfSV AVITILDND1D LAGMDISFPE 1TVA VAVD1T1 LIPVETEST1 YLSTSK1TTI</p> <p>LQPTNVVAIV TEATGVSAIP EKLVLHGTP AVSEKPDVAT VTANVSIHGT</p> <p>FSLGPSIVYI EEMKNGTfN TAEVLIRRTG GFTGNVS1TV KTFGERCAQM</p> <p>EPNALPFRGI YGISNLTWAV EEEDFEEQTL TLFLDGERE RKVSVQILD1D</p> <p>DEPEGQEFFY VFL1NPQGA QIVEGKDDTG FAFAFMVIT GSDLHNGIIG</p> <p>FSEESQSGLE LREGAVMRRL HLIVTROPNR AFEDVKVfWR VTLNK1TVVVL</p> <p>QKDG1VNLMEE LQSVSGTTTC TMGQTKCFIS IELKPEKVPO VEVYFFVELY</p> <p>EATAGAA1NN SARFAQIKIL EDESQSLVY FSVGSRLA VAKKATLISLQ</p> <p>VARDSGTGLM MSVNFSTQEL RSAETIGRTI ISPAISGKDF VITEGTLVFE</p> <p>PGQRSTVLDV IL1PETGSLN SFPKRfQIVL FDPKGGARID K1VYGTANITL</p> <p>VSDADSQAIW GLADQLHQP1V NDDILNRVLH TISMKVATEN TDEQLSAMMH</p> <p>LIEKITTEGK IQAFSVASRT LFYEILCSLI NPKRKDTRGF SHFAEVTE1NF AFSLLTNVTC</p> <p>GSPGEKSKTI LDSCPVL1SIL ALHWY1PQ1IN GHKfEGKEGD YIRIPERLLD</p> <p>VQDAEIMAGK STCKLVQFTE YSSQWfFISG NNLPTLKNKV LSLSVKQGS</p> <p>QLLTNDNEVL YRIYAAEPRI IPQTS1LCLLW NQAAASWLSD SQFCKVIEET</p>
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576	190168	G Protein-Coupled Receptor GPR58	NM_014626	ADYVECACSH MSVYAVYART DNLSSYNEAF FTSGFICISG LCLAVLSHIF CARYSMFAAK LLTHMMAASL GTQILFLASA YASPOLAEES CSAMAAVTHY LYLCQFSWML IQSVNFWYVL VMNDEHTERR YLLFLLSWG LPAFVVILLI VILKGIYHQS MSQIYGLIHG DLCFIPNVYA ALFTAALVPL TCLVVVFVVF IHAYQVKPQW KAYDDVFRGR TNAAEIPLL YLFALISVTW LWGGLHMAYR HFWMVLVFI FNSLQGLYVF MYYFILHNQM CCPMKASYTV EMNGHPGPST AFFTPGSGMP PAGGEISKST QNLIGAMEEV PPDWERASFQ QGSQASPDLK PSPQNGATFP SSGYGQGS LIADEESQEFD DLIFALKTGA GLSVSDNESG QGSQEGGTLT DSQIVELRRI PIADTHL algtatcat ttatggcagg atccatatic alcacaaat ttggcacaict ttggcacaat atttccatt cctactitcac acacaaoca acttccat cctctccalg gccatcacig atttccctt gggatitcac atcatgcat atagtatgat cagatcggig gagaactgct ggtatttgg gcttiacatt tgcagatt attatgatt tgccttgg cttagacata catcattt tcatcttgc tcagtggcca ttatagatt ttatctata ttttaccat tctttatc caccacaaata actatccag tcatataaag attgciact ctatgtgtt cggctccctgg agcatttggc ttggggcgg tctctcaga ggccatgca gatggaatag agggctatga catcttgggt gctgttcca gtcttggccc agtgaigtc acaagctat gggggaccac cttgttatg gcaggttict tcatctcgg gtctatgag ttggggattt acggcaaaat tttgcagta tccagaaac atgtcagc calcataac ttgcgagaaa alcaaaataa tcaagtgaag aaagacaaaa aagtgcocaa aactttagga atagttaga gatttttct attatgttgg ttcttggtt tcttcaaat ttatggat ccttttga acttctac tcttggatt ttgttggc cttgacalg gtttggcatt ttatcttca calgtatcc gtataalat ggttttict atccctggtt tgcagagca ctagaataa tttgtcagg taaatttct agtcatggt tccataatc tatgttgtt algcaaaaag aaagttaga g MYSEFMAGSIF ITIFGNLAMI ISISYFKQLH TPTNFI LSLM AITDFLLGFT IMPYSMIRSV ENCWYFGLTF CKIYYSFDLM LSITSIFHLC SVAIDRFYAI CYPLL YSTKI TIPVKRLLL LCWSVPGAFA FGAVFSEAYA DGIEGYDILV ACSSSCPVMF NKLWGTTLFM AGFTPGSMM VGIYKIFAV SRKHAHAINN LRENQNNQVK KDKKAATLG IVIGVFLLCW FPCFTILLD PFLNFSTPVV LFDALTWFGY FNSTCNPLIY GFFYPWFRRA LKYILLGKIF SSCFHNTILC MQKESE	A	Homo sapiens
577	190168	G Protein-Coupled Receptor GPR58	NP_055441.1	MYSEFMAGSIF ITIFGNLAMI ISISYFKQLH TPTNFI LSLM AITDFLLGFT IMPYSMIRSV ENCWYFGLTF CKIYYSFDLM LSITSIFHLC SVAIDRFYAI CYPLL YSTKI TIPVKRLLL LCWSVPGAFA FGAVFSEAYA DGIEGYDILV ACSSSCPVMF NKLWGTTLFM AGFTPGSMM VGIYKIFAV SRKHAHAINN LRENQNNQVK KDKKAATLG IVIGVFLLCW FPCFTILLD PFLNFSTPVV LFDALTWFGY FNSTCNPLIY GFFYPWFRRA LKYILLGKIF SSCFHNTILC MQKESE	P	Homo sapiens
578	190170	G Protein-Coupled Receptor GPR57	NM_014627	alggatctaa ctatatic ccagagaccta tccagtgc caaaattgt aataaagatc ctgtctccc accaacgct cttitcalgt ccaggigata atgtatcgg ttatgactgg agccaatatt atccactatt cgggaacttg gtataaagg ttccatalc gcatitcaaa cagcttact cttccacaaa ctttcigatc cttccatgg caaccacgga ctttcigcgg ggttttgca ttatgccata cagcalaalg cgatcagttgg agagtgcg gtacttgggg gatggcttt gtataatcca caaagctt accatgac tgcagacitgac cttcaatttc cactctgtt ccattgctat tgaacgatt taigccggtgt gtacccctt acattacaca accaaaiga cgaactccac cataaagcaa ctgcggcat ttgtctggc agttctgct ctttttct ttgtttagt tclatcigag gccgalttt cgggtatgca gagctataag atacttgg ctgtctcaa ttcttgc cttacttca acaattcgg ggggacaata ttgttacia calgtttct tacccctggc tccatcagg ttgttattia tggcaaatc ttatctgtt ccaaacagca tgcctgagc atcagccatg tgcctgaaaa cacaaggggg gcagtgaata aacacctatc caagaaaaag gacaggaaaag cagcgaagac actgggata gtaattggggg ttgtctggc ttgtctgggt ccttggct tttgtctt gatigacca taactagact actccactcc calactala ttggaictt tagtggct ccggtactt aacttactt gcaacctct taitcaggc ttuttaalc calgtttica gaaagcattc aagtacatag tgcagggaaa aalatttagc tccatttag aaactgcataa ttgttict gaagcacatt aa MDLTYIPEDL SSCPKFVNKI LSSHQPLFSC PGDNVFGYDW SHDYPLFGNL VIMVSISHFK QLHSPNTNFI LSMATTDFLL GFVIMPYSIM RSVESCWYFG	A	Homo sapiens
579	190170	G Protein-Coupled Receptor	NP_055442.1	MDLTYIPEDL SSCPKFVNKI LSSHQPLFSC PGDNVFGYDW SHDYPLFGNL VIMVSISHFK QLHSPNTNFI LSMATTDFLL GFVIMPYSIM RSVESCWYFG	P	Homo sapiens

GPR57

580 190188 G Protein- AB049405 A Homo sapiens  
Coupled Receptor  
LGR6

DGCKFHTSF DMMLRLTSIF HLCSIAIDRF YAVCYPLHYT TKMTNSTIKQ  
LLAFCSWVPA LFSFGLVLSE ADVSGMQSYK ILVACNFCA LTFNFWGTI  
LFTTCFFTPG SIMVGIYGI FIVSKQHARV ISHVPEPTKG AVKHLSSKKK  
DRKAAKTLGI VMGVFLACWL PCFLAVLIDP YLDYSTPILI DLLVWLRYF  
NSTCNPLIHG FFNPWFQKAF KYIVSGKIFS SHSETANLFP EAH  
ggccactggca gggagggcggc atcagtgt cggccgactg cctgagctc gggctgtccg ccgttccggg gggactgggac  
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ggagggagctg cgtctctc gggaacctc ctacacatc ccaggagacag cacttctgg tctctacagc ctgaaatcc  
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caggagaaoca ctatgaocag gaaactggag agctccagct ggaatggag gaaactcaagc caacccacag tttccaggt  
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gcttggag ggggtggggc tttcagccct ctggcttggc ctgttca caggttga tttccctcc catttctc tttccctc



581	190188	G Protein- Coupled Receptor LGR6	AAG17168.1	<p>ttccctttcc tctctcccc tggggaatg atggcigtctt claaacaaa lacaacaaa actcagcagt gfgatctata gcagatggc ccagttacctg gctccacatga tcaactctct ccttgtagca taccacagg gfgctctctg gccctggctt cccctggcct tctcagctt caccttgata ctgggcctct tcttgctat gctgaagct gggacacaga gacciggact ttgctgct taagggaat gagggaagta aagacagtga aggggtgag ggttgatca</p> <p>MRLREGRSA RAGQNLNRAG SARRGAPRDL SMNNLTELOP GLFHHLRFLF P Homo sapiens</p> <p>ELRLSGNHL S HIPQAFSG L YSLKILMLQN NQLGGIPAEA LWELPSLQSL</p> <p>DLNYNKLQEF PVAIRTLGRL QELGFHNNNI KAPEKAFMG NPLQLTIHFY</p> <p>DNPIQFVGRS AFQYLPKLHT LSLNGAMDIQ EFPDLKGTTS LEILTLTRAG</p> <p>IRLLPSGMCQ QLPRLRVLEL SHNQIEELPS LHRQCQKLEEI GLQHNRIWEI GADTFSQLSS</p> <p>LQALDLSWNA IRSIPEAFS TLHSLVKLDL TDNQLTTLPL AGLGGLMHLK</p> <p>LKGNLALSQA FSKDSFPKLR ILEVPIYQC CPYGMCSFF KASQQWEAED</p> <p>LHLDDEESSK RPLGLLARQA ENHYDQDLDE LQLEMEDSKP HPSVQCSPTP</p> <p>GPFKPCEYLF ESWGIRLA VW AIVLLSVLCN GLVLLTVFAG GPVPLPPVKF</p> <p>VVGAAGANT LTGISCGLLA SVDALTFQGF SEYGARWETG LGCRTATGFLA</p> <p>VLGSEASVLL LTLAAVQCSV SVSCVRAYGK SPSLGSVRAG VLGCLALAGL</p> <p>AAALPLASVG EYGASPLCLP YAPPEGQPA L GFTVALVMM NSFCLV VAG</p> <p>AYKLYCDLP RGDFAVWDC AMVRHVAWLI FADGLLYCPV AFLSFASMLG</p> <p>LFPVTPEAVK SVLLVVLPL ACLNPLLYLL FNPFRDDLRL RLRPRAGDSG</p> <p>PLAYAAAGEL EKSSCDSTQA L VAFSDVDLI LEASEAGRP GLETYGFPSV</p> <p>TLISCCQPGA PRLEGSHCPE PEGNHFGNPQ PSMDGELLRL AEGSTPAGGG</p> <p>LSGGGFQPS GLALLHTY</p>
582	190414	G Protein-coupled Receptor GPR101	AF411115	<p>aigagatcca cctgacacaa cagcacggcg gagagtaaca gcagccacac gfgatggccc cctccaaaa tggccatcag A Homo sapiens</p> <p>ccggcccaac ggccalcac gctcaaccgt gctggtaic ttccggcg cctcttgg cggcaacata gfgctggcgc</p> <p>tagtgttga gcgcagcgcg cagctgtctgc aggtgaccaa cggtttalc tttaacctcc tggaccca cctgctgacg</p> <p>atttgcctg tggcccccgt gggtgtggcc acctgtgtg cttctctg gccctcaac agccactct gcacggccct</p> <p>ggftagccct accaccgt tggcttgc caggtcaac accattgtg tgggtgtcag ggaicgclac ttgccaatca tccacctct</p> <p>cctclacccg tccaagatga cccagggcg cgggttaacctg cctctatg gcacactggat tggggccalc ctgcagagca</p> <p>ctctccact ctacggctgg ggccaggcgt ccttgatga gcgcacatgt cctgctcca tgaicgggg ggccaggcccc</p> <p>agctacacia ttctagcgt gggtctctc atgctalc cactgattg catgattgg tgcactccg tgggtgtctg tgcagccccg</p> <p>agtcagcatg cctgctgta caatgtcaag agtacacatgt tggaaagtgc agtcaaggac tgggtgtgga atgaggtatga</p> <p>agagggagca agaaagaaag agagttcca agagttcca agagttcca aggttggag aggttggag aggttggag</p> <p>agggcagaaat ggaaagcaag gacgggagcc tgaaggccaa ggaaagaaag acggggagca aggttggag aggttggag</p> <p>agggggagcg aggttggag aggttggag aggttggag aggttggag aggttggag aggttggag aggttggag</p> <p>tgaaggaagac agcatgaaag cagacaaagg tgcacagag gtcaacatgt gtcacatga cttgggtgaa gatgacatgg</p> <p>agtttggga agacagacalc aaattcaggt aggttgaagt aggttgaagt aggttgaagt aggttgaagt aggttgaagt</p> <p>cgttaacagca acagcaacc tctctggcc aggttggag aggttggag tgaatggag aggttgaagt aggttgaagt</p> <p>tccctggggc cctactgt tttagcag cttggccgtgt gggttggatgt ggaacacag gtacccacgt gggttggatgt</p> <p>calaalcac tgggtttct tctgtcag cttgcatcac cctatgtct atgggtatgt gcaacagac attaaagag aaatccagga</p> <p>catgtctgaag aggttctct gcaaggaaga gcccgcgaag aggttgaagt aggttgaagt aggttgaagt aggttgaagt</p> <p>cigaaggcaag gattgtccct tctacgatt ctgtacttt tcttga</p>

583	190414	G Protein-coupled Receptor GPR101	CAC33098.1	<p>MTSTCTNSTR ESNSSHTCMP LSKMPISLAH GIIRSTVL VI FLAASFVGNL VLALVLQRKP P</p> <p>QLLQVTNRFI FNLLVTDLLQ ISL VAPWVVA TSVPLFWPLN SHFCTALVSL</p> <p>THLFAFASVN TIVL VSDRY LSIHPLSY SKMTQRRGYL LLYGTWIVAI</p> <p>LQSTPPLYGW QQAAFDERNA LCSMIWGASP SYTILSVVSF IVPLIVMIA</p> <p>CYSVVFAAR RQHALLYNVK RHSLEVRVKD CVENEDEEGA EKKEEFQDES</p> <p>EFRRQHEGEV KAKEGRMEAK DGLSKAKEGS TGTSESSVEA RGSEEVRESS</p> <p>TVASDGSMEG KEGSTKVEEN SMKADKGRTE VNQCSIDLGE DGMFEGEDDI</p> <p>NFSEDDVEAV NPESLPPSR RNSNSNPPLP RCYQCKAAKV IFIIFSYVL SLGPPYCFILAV</p> <p>LAVWVDVETQ VPQWVITIII WLFLQCCIH PYVYGYMHKT IKKEIQDMLK</p> <p>KFFCKEPPK EDSDPDLPGT EGGTEGKIVP SYDSAIFP</p>	Homo sapiens
584	190418	Inflammation-Related G Protein-Coupled Receptor EX33	NM_020370	<p>taactgtcca cagaaagga cgtctcttg ggtgagtga acttctcca ttatagaaag aatgaaggc tgaagaatic agcctctatc A</p> <p>atgiggaaaca gctctgacgc caactctcc tgciaaccatg agctctgctt gggctatcgt taigtgtcag ttatgtgggg</p> <p>gggtgggggtg gctgtgacag gcaccgtggg caatgtgtc accctacttg ccttggccat ccagcccaag ctccgtaccc</p> <p>gattcaacct gctcalagcc aaactcacac tggctgact cctctactgc agctctctc agccctctc tgggatacc tacttccacc</p> <p>tgcactggcg caocgggtgc acctcttgcg gggatitgg gctctctt ttgccctcca attctgtc catcttgacc ctctgccca</p> <p>tgcactggg agctacctc ctatggcc acctaaagct ttitcccaa gttttcagtg ccaaggggat agtcttggca</p> <p>ctgtgtgagca cctgggtgtt gggcgtggcc agcttctgc cctcttggcc latttatac ctgttaccgt tagtctgac ctgacgttt</p> <p>gaccgtacc gaggccggcc ttaccacc atctcatgg gctacttct tggcttggg ctgacgtgtg tggcactt ctatgtctc</p> <p>atccaccgcc aggtcaaacg agcagcacag gcacttggacc aatacaagt gcgacagggca agcatccact ccaacctgt</p> <p>ggccaggact gatgaggcca tgcctgtctg ttccaggag ctggacagca ggtttagcalt aggaaggacc agtgggggga</p> <p>tttcatctga gccagtcat gctgccacca ccagacctt ggaaggggac tcatcagaag tgggagacca gatcaacagc</p> <p>aagagagcta agcagatggc agagaaagc cctccagaag catctgccaa agocccagca attaaaggag ccagaaagagc</p> <p>tccggaltct tcatcgaat ttgggaaggt gactcgaatg tgtttgtctg ttttctctg ctgttccgt agclacatcc ccttctgtc</p> <p>gtcaacatt ctggatgcca ggttccaggc tcccggggtg gtccacatgc ttgttccaa cctcacctgg ctcaatggt</p> <p>gcatcaacc tgtgtctat gcagccatga accgccaatt ccgccaagca taaggctcca tttaaagaag agggcccccgg</p> <p>agtttccata ggctccatta gaactgtgac octagtacc agaattcagg acgtctctc ccaggacca agtggccagg</p> <p>taataggaga ataggtagaa taacacatgt gggcatttc acaacaatct ctccagacc tcccaaatca agtcttcca tcatgtatc</p> <p>aatgtttcag ccttagactg cccaaggagt attaataat attaatgtg gaattctgt ctttaaaaa aaaaaaata aaaaaagaaa</p>	Homo sapiens
585	190418	Inflammation-Related G Protein-Coupled Receptor EX33	NP_065103.1	<p>MWNSSDANFS CYHESVLGYR YVAVSWGUVV AVTGTGTVGNVL TLLALAIQPK P</p> <p>LRTRFNLLIA NLTLADLLYC TLLQPFVSVD T YLHLHWRTGA TFCRVFGLL</p> <p>FASNSVSILT LCLIALGRYL LIAHPKLPQ VFSAGGIVLA LVSTWVVVGA SFAPLWPIYI</p> <p>LVPVVTCSF DRIRGRPYT ILMGIYFVLG LSSVGIFYCL IHRQVKRAAQ</p> <p>ALDQYKLRQA SIHSHVART DEAMPGRFQE LDSRLASGGP SEGISSEPV</p> <p>AATTQTLEGD SSEVGDDQINS KRAKQMAEKS PPEASAKAQP IKGARRAPDS</p> <p>SSEFGKVTRM CFAVFLCFAL SYPFLLLNI LDARVQAPRV VHMLAANLTW</p> <p>LNGCINPVLY AAMNRQFRQA YGSILKRGPR SFHRLH</p>	Homo sapiens
586	190419	G Protein-Coupled Receptor Ls190419	AJ303165	<p>ctttgttcca gagtaaac agtttttct ctctccacag caaalatctt gacagtgatc atctctcc agctgtggc aagaagacag A</p> <p>aagctctct acaactatct ctggcactc gctgtgccc acatctgtt cctttttt atagtgttg tggacttct gttggaagat</p> <p>ttcatctga acalgcagat gctcaggc cccgacaaga tcatagaagt gcttgaattc tcatcatcc acacttcat atggattact</p>	Homo sapiens

587	190419	G Protein- Coupled Receptor Ls190419	CAC33085.1	LCFRAKPVFL LSTANILTVI ILSQLVARRQ KSSYNYLLAL AAADILVLFF IVFVDFLLED FILNMQMPQV PDKIEVLEF SSIHTSIWIT VPLTIDRYIA VCHPLKYHTV SYPARTRKVI VSVYITCFLT SIPYYWWPNI WTEDYISTSV HHVLWIHCF TVYL VPCSF FILNSIIVYK LRRKSNFRLR GYSTGKTTAI LFTITSIFAT LWAPRIIMIL YHLYGAPIQN RWLVHIMSDI ANMLALLNTA INFFLYCFIS KRFR	aagttictia agttigaagc gtacagttca accaacaazaa taaatggcga ttclacatc aaaaalacagg aaatttaaat ttatttga atgtaatgca gcatgtatga aagacttaac cagtgttta aaactcaact ttcaazagaa agatagtatt gctccctgtt tcatataaac ctagagagat gtaatcagta agcaagaaagg aaaaagggaa attcacaag taacttttg tgcctgttct tttaaacc agcatggaga gaaaattat gtcttgcaa ccatccatct ccgtalcaga aatgggaacca aatggcact tcaagcaataa caacagcagg aacgtcacaa ttgaaact caagagagaa tttttccaa t'g'atatact galaattt tctggggag tctgggaaa tgggtgtcc alalatgtt tccggcagcc ttataagaa ttacatcgc tgaacgttt calgtataat cgggcaatt cagatctct gttcataagc acgttccct tcaaggcaga ctattatt agagagctca attggatatt tggagacctg gccggcagga ttatgtta ttcttgtat gtcaacatgt acagcagtat ttattctg accgtctga g'gt'gtgtgc ttccgtgca alggttacc cccttgggt tctgtcgtc accagcatca ggagtgctg g'at'cctgt gggtatcat ggatctctat calggctcc tcaataatgc tccgggacag tggctctgag cagaacggca g'gt'cacatc algcttagag ctgaatctt alaaatgtc taagctgcag accatgaact atatggctt gggtgggc tgcctgcgc cattttac acacagcat t'gt'atcgc tgaatcgc gggttgtta aaggtggag tccagaatc gggtgtgggc gttttcaca ggaaaggcact gaaccacatc alcatcact tgaatctt ctctgtgt ttccgtccct atcacact gaaggccgc cactgacga calggaaagt gggtttatgc aaagacagac tgcataaagc ttgggtalc acactggct tggcagcagc caatggctgc ttcaatctc tgcctatta cttgtctgg gagaattta aggcacagact aaggtctgca ctcagaagag gccatocaa gaaggcaag acaaggtgt tttccgt t'gt'gtgtgt tgggaagag aaacaagagt ataaggagct cttagatgag accgttgtt g'at'cctgt gtcatctc attacatc agtctcaaa tgaattgtta ttacatc tccaacaaa t'gt'gtattc taattttag ttgaccata ctttgtta taagacctac ttcaaat ttatcagtg tatttcagt tgt'gt'gtct taatggagga tacaaggagga aaaaacctca cttagagctt gttgggtgaa alatacact gggaazaaat gcaagcaca ttggatctta ctittctca gatatgaac cagatctcgc gccatcagg ctcttaaat tcttcaaaag agccacaact tcccagctt ctccagctcc cctgtctct tcaatccctt gagatagag aactacagac gctactggaa gccocagagc agaaaagag cacatctaa g'at'cacagga aagactaact g't'gaaaagga aggtgtctct alaaacagc agcatcaagt ccaaagttaag gacagtga gaaaaggggg agaaaggttg gaagcaagga gaactgtgcaa taagttaggggg aaggaagaat ttcatttgc attgggagag aggttcaac acactgaag caacctatt t'ct'atctt ctcttgc aggtgtatag gaaggacagc aaaagttagga ggaggtalcgc gggtcagct cttaggaaag aagaattgt g'at'atagaaag gaagggggat catcaagagc atgtatcga aattttctt g'ag'atgcagg ttgtgtacc t'gt'ctgaggt tctcttcc attaatcat tgggtatggaa gccaaaaa aaagaggtgc ctctgagat taggggtgag cactcaagg aaagatggag tagagggcaa alagcaaaag t'gt'gtcact cctgaaatc tattaacat tccgcagagag atgtatgggg agtgtcgc ttcccttgg agatgtgta gaaaacact agatgtgtg agaggttct tctgtccat tgaacaaagg ctgaaggatc laccaatc latccacag accatgtac tgaacaaat tgaatgcagt	P	Homo sapiens
588	190427	Cysteiny/ Leukotriene CYSLT2 Receptor	NM_020377	aagttictia agttigaagc gtacagttca accaacaazaa taaatggcga ttclacatc aaaaalacagg aaatttaaat ttatttga atgtaatgca gcatgtatga aagacttaac cagtgttta aaactcaact ttcaazagaa agatagtatt gctccctgtt tcatataaac ctagagagat gtaatcagta agcaagaaagg aaaaagggaa attcacaag taacttttg tgcctgttct tttaaacc agcatggaga gaaaattat gtcttgcaa ccatccatct ccgtalcaga aatgggaacca aatggcact tcaagcaataa caacagcagg aacgtcacaa ttgaaact caagagagaa tttttccaa t'g'atatact galaattt tctggggag tctgggaaa tgggtgtcc alalatgtt tccggcagcc ttataagaa ttacatcgc tgaacgttt calgtataat cgggcaatt cagatctct gttcataagc acgttccct tcaaggcaga ctattatt agagagctca attggatatt tggagacctg gccggcagga ttatgtta ttcttgtat gtcaacatgt acagcagtat ttattctg accgtctga g'gt'gtgtgc ttccgtgca alggttacc cccttgggt tctgtcgtc accagcatca ggagtgctg g'at'cctgt gggtatcat ggatctctat calggctcc tcaataatgc tccgggacag tggctctgag cagaacggca g'gt'cacatc algcttagag ctgaatctt alaaatgtc taagctgcag accatgaact atatggctt gggtgggc tgcctgcgc cattttac acacagcat t'gt'atcgc tgaatcgc gggttgtta aaggtggag tccagaatc gggtgtgggc gttttcaca ggaaaggcact gaaccacatc alcatcact tgaatctt ctctgtgt ttccgtccct atcacact gaaggccgc cactgacga calggaaagt gggtttatgc aaagacagac tgcataaagc ttgggtalc acactggct tggcagcagc caatggctgc ttcaatctc tgcctatta cttgtctgg gagaattta aggcacagact aaggtctgca ctcagaagag gccatocaa gaaggcaag acaaggtgt tttccgt t'gt'gtgtgt tgggaagag aaacaagagt ataaggagct cttagatgag accgttgtt g'at'cctgt gtcatctc attacatc agtctcaaa tgaattgtta ttacatc tccaacaaa t'gt'gtattc taattttag ttgaccata ctttgtta taagacctac ttcaaat ttatcagtg tatttcagt tgt'gt'gtct taatggagga tacaaggagga aaaaacctca cttagagctt gttgggtgaa alatacact gggaazaaat gcaagcaca ttggatctta ctittctca gatatgaac cagatctcgc gccatcagg ctcttaaat tcttcaaaag agccacaact tcccagctt ctccagctcc cctgtctct tcaatccctt gagatagag aactacagac gctactggaa gccocagagc agaaaagag cacatctaa g'at'cacagga aagactaact g't'gaaaagga aggtgtctct alaaacagc agcatcaagt ccaaagttaag gacagtga gaaaaggggg agaaaggttg gaagcaagga gaactgtgcaa taagttaggggg aaggaagaat ttcatttgc attgggagag aggttcaac acactgaag caacctatt t'ct'atctt ctcttgc aggtgtatag gaaggacagc aaaagttagga ggaggtalcgc gggtcagct cttaggaaag aagaattgt g'at'atagaaag gaagggggat catcaagagc atgtatcga aattttctt g'ag'atgcagg ttgtgtacc t'gt'ctgaggt tctcttcc attaatcat tgggtatggaa gccaaaaa aaagaggtgc ctctgagat taggggtgag cactcaagg aaagatggag tagagggcaa alagcaaaag t'gt'gtcact cctgaaatc tattaacat tccgcagagag atgtatgggg agtgtcgc ttcccttgg agatgtgta gaaaacact agatgtgtg agaggttct tctgtccat tgaacaaagg ctgaaggatc laccaatc latccacag accatgtac tgaacaaat tgaatgcagt	A	Homo sapiens	

589	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	<p>ctccctgcag ggcagattat gccaggcact ttacattgt tgaaccatt tgacattac accaaagctc tgaattccat ttacagctg aagaataaga agcttagaga aattaaagaag ctgtttiaag ttacacagc tgaagaagc ttataaagc tctgtgcaga agtgttggct gggtgctc cccaccacia ccttgttaa cttocaggaa gattgttga aagcttgaat aaaagctgct cttcttacc aattctcc cctctcac tctcaaga aaacaaaag ttctctca gattgtga cicalaglac agtaaaagg gtaggtgata tggcattctg aaagtagga gggactaagt cagctcat actaac MERKFSLSQP SISVSEMEPN GTFNNNSRN CTIENFKREF FPIVYLIFF WGVNGLSI P YVFLQPYKKS TSVNVFMLNL AISDLLFIST LPFRADYYLR GSNWIFGDLA CRIMSYSLYV NMYSSYFLT VLSVVRFLAM VHPFRLHVT SRSAWILCG IIVILMASS IMLLDSGSEQ NGSVTSLEL NLYKIAKLQT MNYIALVGC LLPFTLSIC YLLIRVLLK VEVPESGLRV SHRKALTTII ITLIFFLCF LPYHTLRTVH LTTWKVGLCK DRLHKALVIT LALAAANACF NPLLYYFAGE NFKDRLKSAL RKGHPQKAKT KCVFPVS VWL RKEITRV cctgtgtcc agtgtctgga caaacttaa cttctcaagg actccaaaa cagagagacac caggagcctg aatggggaac gattctgca gctacagga tggggattac agcgacctt cggaccgccc tgggacagc cggatggcg cctgtgtgc cctgacccc cgtgcgctgg cccgctccc actgtatgcc gccattctt tgggtggggg gccggggcaat gccatgggtg cctgggtggc tgggaagggt gccggccgga ggggtgggtg caccgtgtt cttaccctgg cctggcgga ttgtgtgtc tgttgtct tggccatct ggcatgtccc atgtccgtg gaggccagc gccgtatggc gcagtggggt gtcggggcgt ggcctccalc atctgtctga ccatgtatgc cagctgtctt cttctggcag cttcagtc gcacctctg tttctggctc tggggcctgc cgtgtgtctt aggtgtcagc gggcgtgtgg ggtgtcaggtg gccgtggggg cagcctggac actggcctg cgtctaccc tggcctccg cactaccg cggctgcac agggacact cccagccgg cgtcaggtgtg tgggtgacta cggcggtctc tccagcacc gaaatgggt gactgcac cgtgtctt tgggtctt gggggccctg ggtggcgtg ccagctgcca cgtgtccct cgtgtgtgg cagcccgac cgtccggcg cgtgggcacag ccatgtgtt ggggtttt gtctgtgg caocctaca cctgtgtggg cgtgtgtca cgtgtggc cccgaactc gcactctgg ccaggccct ggggcgtga cccctatg tgggctgtc cctgtcac agtgtctca atccatgt cttctgtat ttggggggg ctcaactcg ccgtgtcag cagctgtctt gtcctggc cctggggg tccagggcc agggacgaag tgggacag aagaaloca ccagccatga cctgtgtc gtagggag ttaggtgtg agagacatg tgggtgtga tctcttalc tcatccaca agctgtgtt caggcatagc tggatccagg agctcaatga tgtctcat ttattctc ctatccaa cagatacca tcatgactt gctatgtga aggtctttt aggcactaga galatagcag tgaocaaaac agacaaaat cctgccc MGNDSSVSEY GDYSDLSRP VDCLDGACLA IDPLRVAPLP LYAIFLVGV P PGNAMVAWVA GKVARRR VGA TWLLHLA VAD LLCCLSLPIL AVPIARGGHW VQVACGAAWT LALLTVPSA IYRLHQEHF PARLQCVVDY GSSSTENAV TAIRFLFGL GPLVAVASCH SALLCWAARR CRPLGTAVV GFFVCWAPYH LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPML FLYFGRAQLR RSLPAACHWA LRESQQDES VSKKSTSHD LVSEMEV algttggcc cgtgtgtt gggcctcagc cttgtggct tctgcaccc tgggacgggg gcccatgtt gctgtcaca gcaacttagg algaagggg actatgtt gggggggctg ttcccttgg gcgagggcga ggaaggctgg ctcgagcc ggacaggcc cagcagccct gttgtcaca ggtacaggg tgggacggc tgggtgggg tcaagggtgac caggtgtgg gtgtcttga gctggggggc aggtggocat cttgggtt gttgtgtt aggttctt caaacggct gctgtggga ctggccatga aatggcgt ggaaggatc aacaacaagt cggatgtt gcccgggctg cgtgtggct acgacctt tgalactgc tgggagcctg tgggtggcat gaagccagc ctatgttcc tggccaaagg aggcagcgc gacatggc</p>	Homo sapiens
590	190437	G Protein- Coupled Receptor C5L2	NM_018485	<p>ctgtgtgtc agtgtctgga caaacttaa cttctcaagg actccaaaa cagagagacac caggagcctg aatggggaac gattctgca gctacagga tggggattac agcgacctt cggaccgccc tgggacagc cggatggcg cctgtgtgc cctgacccc cgtgcgctgg cccgctccc actgtatgcc gccattctt tgggtggggg gccggggcaat gccatgggtg cctgggtggc tgggaagggt gccggccgga ggggtgggtg caccgtgtt cttaccctgg cctggcgga ttgtgtgtc tgttgtct tggccatct ggcatgtccc atgtccgtg gaggccagc gccgtatggc gcagtggggt gtcggggcgt ggcctccalc atctgtctga ccatgtatgc cagctgtctt cttctggcag cttcagtc gcacctctg tttctggctc tggggcctgc cgtgtgtctt aggtgtcagc gggcgtgtgg ggtgtcaggtg gccgtggggg cagcctggac actggcctg cgtctaccc tggcctccg cactaccg cggctgcac agggacact cccagccgg cgtcaggtgtg tgggtgacta cggcggtctc tccagcacc gaaatgggt gactgcac cgtgtctt tgggtctt gggggccctg ggtggcgtg ccagctgcca cgtgtccct cgtgtgtgg cagcccgac cgtccggcg cgtgggcacag ccatgtgtt ggggtttt gtctgtgg caocctaca cctgtgtggg cgtgtgtca cgtgtggc cccgaactc gcactctgg ccaggccct ggggcgtga cccctatg tgggctgtc cctgtcac agtgtctca atccatgt cttctgtat ttggggggg ctcaactcg ccgtgtcag cagctgtctt gtcctggc cctggggg tccagggcc agggacgaag tgggacag aagaaloca ccagccatga cctgtgtc gtagggag ttaggtgtg agagacatg tgggtgtga tctcttalc tcatccaca agctgtgtt caggcatagc tggatccagg agctcaatga tgtctcat ttattctc ctatccaa cagatacca tcatgactt gctatgtga aggtctttt aggcactaga galatagcag tgaocaaaac agacaaaat cctgccc MGNDSSVSEY GDYSDLSRP VDCLDGACLA IDPLRVAPLP LYAIFLVGV P PGNAMVAWVA GKVARRR VGA TWLLHLA VAD LLCCLSLPIL AVPIARGGHW VQVACGAAWT LALLTVPSA IYRLHQEHF PARLQCVVDY GSSSTENAV TAIRFLFGL GPLVAVASCH SALLCWAARR CRPLGTAVV GFFVCWAPYH LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPML FLYFGRAQLR RSLPAACHWA LRESQQDES VSKKSTSHD LVSEMEV algttggcc cgtgtgtt gggcctcagc cttgtggct tctgcaccc tgggacgggg gcccatgtt gctgtcaca gcaacttagg algaagggg actatgtt gggggggctg ttcccttgg gcgagggcga ggaaggctgg ctcgagcc ggacaggcc cagcagccct gttgtcaca ggtacaggg tgggacggc tgggtgggg tcaagggtgac caggtgtgg gtgtcttga gctggggggc aggtggocat cttgggtt gttgtgtt aggttctt caaacggct gctgtggga ctggccatga aatggcgt ggaaggatc aacaacaagt cggatgtt gcccgggctg cgtgtggct acgacctt tgalactgc tgggagcctg tgggtggcat gaagccagc ctatgttcc tggccaaagg aggcagcgc gacatggc</p>	Homo sapiens
591	190437	G Protein- Coupled Receptor C5L2	NP_060955.1	<p>ctgtgtgtc agtgtctgga caaacttaa cttctcaagg actccaaaa cagagagacac caggagcctg aatggggaac gattctgca gctacagga tggggattac agcgacctt cggaccgccc tgggacagc cggatggcg cctgtgtgc cctgacccc cgtgcgctgg cccgctccc actgtatgcc gccattctt tgggtggggg gccggggcaat gccatgggtg cctgggtggc tgggaagggt gccggccgga ggggtgggtg caccgtgtt cttaccctgg cctggcgga ttgtgtgtc tgttgtct tggccatct ggcatgtccc atgtccgtg gaggccagc gccgtatggc gcagtggggt gtcggggcgt ggcctccalc atctgtctga ccatgtatgc cagctgtctt cttctggcag cttcagtc gcacctctg tttctggctc tggggcctgc cgtgtgtctt aggtgtcagc gggcgtgtgg ggtgtcaggtg gccgtggggg cagcctggac actggcctg cgtctaccc tggcctccg cactaccg cggctgcac agggacact cccagccgg cgtcaggtgtg tgggtgacta cggcggtctc tccagcacc gaaatgggt gactgcac cgtgtctt tgggtctt gggggccctg ggtggcgtg ccagctgcca cgtgtccct cgtgtgtgg cagcccgac cgtccggcg cgtgggcacag ccatgtgtt ggggtttt gtctgtgg caocctaca cctgtgtggg cgtgtgtca cgtgtggc cccgaactc gcactctgg ccaggccct ggggcgtga cccctatg tgggctgtc cctgtcac agtgtctca atccatgt cttctgtat ttggggggg ctcaactcg ccgtgtcag cagctgtctt gtcctggc cctggggg tccagggcc agggacgaag tgggacag aagaaloca ccagccatga cctgtgtc gtagggag ttaggtgtg agagacatg tgggtgtga tctcttalc tcatccaca agctgtgtt caggcatagc tggatccagg agctcaatga tgtctcat ttattctc ctatccaa cagatacca tcatgactt gctatgtga aggtctttt aggcactaga galatagcag tgaocaaaac agacaaaat cctgccc MGNDSSVSEY GDYSDLSRP VDCLDGACLA IDPLRVAPLP LYAIFLVGV P PGNAMVAWVA GKVARRR VGA TWLLHLA VAD LLCCLSLPIL AVPIARGGHW VQVACGAAWT LALLTVPSA IYRLHQEHF PARLQCVVDY GSSSTENAV TAIRFLFGL GPLVAVASCH SALLCWAARR CRPLGTAVV GFFVCWAPYH LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPML FLYFGRAQLR RSLPAACHWA LRESQQDES VSKKSTSHD LVSEMEV algttggcc cgtgtgtt gggcctcagc cttgtggct tctgcaccc tgggacgggg gcccatgtt gctgtcaca gcaacttagg algaagggg actatgtt gggggggctg ttcccttgg gcgagggcga ggaaggctgg ctcgagcc ggacaggcc cagcagccct gttgtcaca ggtacaggg tgggacggc tgggtgggg tcaagggtgac caggtgtgg gtgtcttga gctggggggc aggtggocat cttgggtt gttgtgtt aggttctt caaacggct gctgtggga ctggccatga aatggcgt ggaaggatc aacaacaagt cggatgtt gcccgggctg cgtgtggct acgacctt tgalactgc tgggagcctg tgggtggcat gaagccagc ctatgttcc tggccaaagg aggcagcgc gacatggc</p>	Homo sapiens
592	190438	G Protein- Coupled Receptor Ls190438	LG94114	<p>ctgtgtgtc agtgtctgga caaacttaa cttctcaagg actccaaaa cagagagacac caggagcctg aatggggaac gattctgca gctacagga tggggattac agcgacctt cggaccgccc tgggacagc cggatggcg cctgtgtgc cctgacccc cgtgcgctgg cccgctccc actgtatgcc gccattctt tgggtggggg gccggggcaat gccatgggtg cctgggtggc tgggaagggt gccggccgga ggggtgggtg caccgtgtt cttaccctgg cctggcgga ttgtgtgtc tgttgtct tggccatct ggcatgtccc atgtccgtg gaggccagc gccgtatggc gcagtggggt gtcggggcgt ggcctccalc atctgtctga ccatgtatgc cagctgtctt cttctggcag cttcagtc gcacctctg tttctggctc tggggcctgc cgtgtgtctt aggtgtcagc gggcgtgtgg ggtgtcaggtg gccgtggggg cagcctggac actggcctg cgtctaccc tggcctccg cactaccg cggctgcac agggacact cccagccgg cgtcaggtgtg tgggtgacta cggcggtctc tccagcacc gaaatgggt gactgcac cgtgtctt tgggtctt gggggccctg ggtggcgtg ccagctgcca cgtgtccct cgtgtgtgg cagcccgac cgtccggcg cgtgggcacag ccatgtgtt ggggtttt gtctgtgg caocctaca cctgtgtggg cgtgtgtca cgtgtggc cccgaactc gcactctgg ccaggccct ggggcgtga cccctatg tgggctgtc cctgtcac agtgtctca atccatgt cttctgtat ttggggggg ctcaactcg ccgtgtcag cagctgtctt gtcctggc cctggggg tccagggcc agggacgaag tgggacag aagaaloca ccagccatga cctgtgtc gtagggag ttaggtgtg agagacatg tgggtgtga tctcttalc tcatccaca agctgtgtt caggcatagc tggatccagg agctcaatga tgtctcat ttattctc ctatccaa cagatacca tcatgactt gctatgtga aggtctttt aggcactaga galatagcag tgaocaaaac agacaaaat cctgccc MGNDSSVSEY GDYSDLSRP VDCLDGACLA IDPLRVAPLP LYAIFLVGV P PGNAMVAWVA GKVARRR VGA TWLLHLA VAD LLCCLSLPIL AVPIARGGHW VQVACGAAWT LALLTVPSA IYRLHQEHF PARLQCVVDY GSSSTENAV TAIRFLFGL GPLVAVASCH SALLCWAARR CRPLGTAVV GFFVCWAPYH LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPML FLYFGRAQLR RSLPAACHWA LRESQQDES VSKKSTSHD LVSEMEV algttggcc cgtgtgtt gggcctcagc cttgtggct tctgcaccc tgggacgggg gcccatgtt gctgtcaca gcaacttagg algaagggg actatgtt gggggggctg ttcccttgg gcgagggcga ggaaggctgg ctcgagcc ggacaggcc cagcagccct gttgtcaca ggtacaggg tgggacggc tgggtgggg tcaagggtgac caggtgtgg gtgtcttga gctggggggc aggtggocat cttgggtt gttgtgtt aggttctt caaacggct gctgtggga ctggccatga aatggcgt ggaaggatc aacaacaagt cggatgtt gcccgggctg cgtgtggct acgacctt tgalactgc tgggagcctg tgggtggcat gaagccagc ctatgttcc tggccaaagg aggcagcgc gacatggc</p>	Homo sapiens



594	190484	G Protein- Coupled Receptor Ls190484	LG95579	<p>AQDPVKPWQL LENMYNLTFH VGGLPLRFDS SGNVDMYDYL KLVVWQGSVP RLHDVGRFNG SLRTERLKIR WHITSDNQVRP QACAQKPVSR CSRQCQEGQV RRVKGFHSCC YDCVDCEAGS YRQNPDIDAC TFCGQDEWSP ERSTRCFRRR SRFLAWGEPAL VLLLLLLSL ALGLVLAALGLFVHRDSPL VQASGGPLAC FGLVCLGLVC LSVLLFPQP SPARCLAQPP LSHLPLTGCL STLFLQAAEI FVESELPSW ADRLSGCLRG PRAWLVLLA MLVEVALCTW YLVAFPPEVV TDWHMLPTEA LVHCRTRSWV SFGLAHATNA TLAFCLFLGT FLVRSQPGRY NRARGLTFAM LAYFITWVSF VPLLANNQVV LRPVQMGAL LLCVLGILAA FHLPRCYLLM RQPGLNTPF F</p>	<p>Homosapiens</p>
595	190484	G Protein- Coupled Receptor Ls190484	ENSM/PR72619	<p>ctcgtactggc tgggtctct gctgctcctg gggcttcca cgtgctcctg gggcctcgt gttcctggac cctcacgtgg gggcctggcc A cggggccgcc tctggcgggg tctgctgggg gcttctct tcaagaggcag gagggtgggg tgggtctcca agggccctgg gggttagggag cgaagagagg gttggggagg cttcatcaca gggactgggg acagagactgg cagcagggtgg aggggtctgg acgttaggtg cggcctgggg cggggccaca gaactctgact gttggctgggg catgagggttc agctgtgggt gggctgtggg atccgactgt gggctggggc taggggtttag cttgtgggtga gctgtgggtat cctgagctgg cttgggtgtgt ggggttcaact gaggctgggg cacaaggatc atctgtgact gggcctctgg cactggctgt ggcagaggttg gacctcaga atcagctggg gtctgtgggt cagtgggggt gaagctggcc gggcctctct cgcagagagag tggcggcgaag gacgagagag cggagggcag cagggtccgg aggtggggcag tggccatgag gcaagaggagg gggctgtgggg agctgtgtgag taggtcagag taggtgtgggt agacagggg cttccagagc aggttagccag agtagagctc ocacaggagg gcaaggggg gcaagctgggg cagctgtgggt ggcagctcca ggaacacata gggctgacaga atgtgtctgg ocacagggg gaaaggggg cagggctgggg gctgtgtgtg gctgtggcag gttggcaggg cttgtggctgg gttgagcagc tggcagagga gcaagagagga gaaaggcaggg aagggcccca ggactctcag cactcagc gacagctct cgtgtctcca gaaagctcag cagagagga gttcgtacca ccagagggca ggcctggggga agacagga gggcagcctg aagaggtgtg ccagaccca gacacgggg cagaccca gggggcagggc gactgggggg tggccaggggt accaggtgtg gacagggcc agcagggcag gttcgtgggt gaggggcggcc agcagggga ggccggaggga gtagagacag cccatagga agtagtagaa gctggcaggg gctgtccca gctggccaggt tcccccagc cggagctca ggalctggaa gggcggctgt gccaggaaca agaaagcaga agggggcaggg ctagagcagga gcaagcagc acggctggcc gctccatggc gggcctggga gggcggcagc cagccatca accatggc tggcagggcc agggagcagca ggggccag gaaagacgg tccagggc cttgggggta gtaggtctca lcatcagct cttgtgggg cctgtggcca gtggcagga ggtcagctc catgttaggt tcatgtgg gttccagag tctgtctgga caggaggtgg gttgtgtgtg aatcaagat ggtgtgaag accgagtag ggaagagagg tctgtgtg cttcagggca gttacatcc cttcctggc cattgtc accittgg taattatc atggcagg cttgaggtg algactcat gtaggtctca tacaatcac ttacag MEADLGATGH RPRTLEDD SYPQGGWDTV FLVALLLGL PANGLMAWLA P</p>	<p>Homosapiens</p>

596	190595	G Protein- Coupled Receptor SH120	NM_016334	agcacctggg aaaaaggcaga ccgtgtgagg gggcctgtgg cccagcgtg ctgtggccct ggggagtgagg aagtgaggc aggagccttc ctacacctic ggcagtggt tctgatcga cccagcaltc atgattacct cccaalact atttttggg ttgggtggc tttttcat gggccaattg tttaagact atgagatagc tcatgtatgt gtacagggtga tcttctcgt gacgtttgca ttttcttga ccalgtttga gctcalcatc ttgaaatct taggagtgat gaatagcagc tccgttat ttacaggaa aatgaaccgt tgcgtatc tgcgtatct ggttttcalt ggtcctttt acattggcga tttaattg agcaatatac gactactga taacaacga ctcgtttt ccgtctctt atggctgacc ttatgtatt tctctggaa actaggagat cccittccca ttctcagcc aaaaacatggg alttaacca tagaacagt catcagccgg gttgtgtga ttgggtgac tctatggct cttcttctg gatttggtgc tgtcaactgc ccalacact acatgctta cttctcagg aatgtgactg acacagatat tctagccctg gaacggcgac tgcgtcaaac catggatatg atcataagca aaaaagaaaag gatggcaatg gcacggagaa caatgttcca gaagggggaa gtgcataaca aacatcagg tttctgggga atgataaaaa gtttaccac ttacgaltca ggaagtga aa atctactt tattcaacag gaagtggalt cttggaaaga attagcagg cagcttttc tggaaacagc tgaictalat gctaccaagg agagaalaga alactccaaa accitcaagg ggaaatatt taatttctt ggttacttt tctatitia cigtgttgg aatatitca tggctacat caatattgt ttgaltgag ttgggaaaac ggalcctgic acaagggca ttgagatcac tggatatt cgggaalcc aattgtatg gaagtttgg tcccaacaa tttctcat tctgttga ataatcaltg tcaatccal caggagatg ctgaltcic ttaccaagt cttttatgcc altctagca gtagcttc caatgtcat gtctgctat tagcacagat aatggggcalt tactttgt cctctgtgt cctgaltccga atgagtatgc ctttagaala cgcaccala altactgaag tcttggaga acttgagtc aactatc accgttgtt tgaigtatc ttcttggtca gcgtcttc tagcalact ttcttatt tggctcaaa acagggacca gagaagcaaa tggcaccitg aactaaagcc tactacagac tgttagggc cagtggttc aaaaattaga tataaggggg gggaaaaatg gaacacggggc ctgacattt ataacaacac aaaaatgctat ggttagcttt ttaccttca tagcalact cttcccttc aggtgtalact atgacatga gtatgaltcag ccagaacaltg agaggagaa ctacitcaag acaaltacta gcagagagca tccgtgtgtg altatgggt ggtgtatagg cggagaggag ccaagaaact aaagggtgaa aalacactgg aactctgggg caagacatgt ctatgtgtagc tggccaac acgttaggt tccgtttaa ggttcaaltg gaaaaggta tagcttggc ttgagtga ctatataa tcaagagac t MSFLDSSIM ITSQILFFGF GWLFFMRQLF KDYEIRQYVV QVFSVTFAS SCTMFELIIF P EILGVLNSSL RYFHWKMNLC VILLVFMV PFYIGYFVS NIRLLHKQRL LFSCLLWLTF MYFFWKLGDV FPILSPKHGI LSIEQLISRV GVIGVTLMAL LSGFGAVNCP YTYMSYFLRN VTDLDLAL RRLQTMDMI ISKKRMAMA RRTMFQKGEV HNKPSGFWGM IKSVTTSASG SENLTIQGE VDALEELSRQ LFLETADLYA TKERIEYSKT FKGYFNFLG YFFSYCVWK IFMATINIVF DRVGKTDVPT RGIEITVNYL GIQFDVKFWS QHISFILVGI IIVTSIRGLL ITLTKFFYAI SSSKSSNVIV LLLAQIMGMV FVSSVLLIRM SMPLEYRTII TEVLGELQFN FYHRWFDVIF LVSALESSILF LYLAKHQAPE KQMAP	A	Homo sapiens	
597	190595	G Protein- Coupled Receptor SH120	NP_057418.1	aggtgcagg cgggctgtgc tggagcgggg ggcgcggccg cgcgcgagag atgtgactgc ggcgaaggc cagctggagc gtcggcgctg cggggccgcg ggggtcgaat gtctgtggca tcaagagaa agatagagagc taccagggtg ctaccttcc tctgtctt cgtgaltacc tgggtgct ctgaaacgc cagcalatc cgaagctgtg ggcgtgact cctccatg tactgtcc tgcgaact ggaagcaltc tggggcaltg tgggtgggc ggtggccggg gcggcgcc tgcaltact gtctgtalg ctatctcc tgggtggct gcccttalc aagggagagg agaaagagag cctgtgggc ctcacttc tgttctct ggggacctg ggcctttg ggtgactg tgccttalc altcaggagg acgagaccat cgtctgtc cggcgcttcc tctggggct ccttttgc ctctgtct cctgtctt cgtggcgtgc tggcgctgc ggaaggctgt gcggcaltgc acggggcccg cgggctgca gctgtgtggc ctggcgctgt gccgtalgt ggtgcaagtc altatcgtc tggagtggct ggtgtcacc gttgtgtg acacaaggc agcctgtgc taccagcoca tggacttgt galggccctc	A	Homo sapiens	
598	190599	G Protein- Coupled Receptor GPC5B	NM_016235				Homo sapiens

599	190599	G Protein- Coupled Receptor GPCR5B	NP_057319.1	<p>atctacagaca tggtaactgct tgggtgacacc ctgggggctgg ccctctcac tctgtgctggc aagttcaaga ggtgggaaagct  gaaagggggccc ttctctctca tcaagacctt cctctctgtg ctatctggg tggccctggat gaccatggat ctctctggca atgtcaagct  gcagcaggggg gtagccctggg acgacccccc ctggggccac acgtctggcgg ccagcgggctg ggtctctgic atcttccacg  ccatccctga gattccacg accctctgc cagccctgca ggaagaaacag cccaactact tgcagacgic gcagccccagg  atgcgggagga cggcccttoga ggaaggacgtg cagctgcccgc gggccctatga ggaagaaacag gcttctcca tggatgaaca  caatgcagct ctccgaaacag caggtatccc caacggcagc ttgggaaaaa gacccagtg cagctggggg aaaaagaccca  gctctccgtt tagaagcaac gtagatcagc caactgagat ggcctgctg ctcaacggctg ggaacacatccc aactgctccg  ccaagtacac caggaagaca ccttgggga aagacttaaa gtccaagaga atcagaattt ctttaccga ttgctctccc tggctgtgtc  tttctgggg gagaatctgg taacagtgc cgaaccaggc cgcctcacag ccaaggacat tggaaatctt agccaaaggggg  atttctgta aatgtaaca ctgacgaact gaaagactaa caaccgacg cggccccctcc cctggccacac acacagacac  gtaataccag accaacctca atccccgcaa actaaagcaa agctaatg aaatgtaatt aggtctcacg gaaatgtgtg  ctgggaagac tgtttatcc tctgggggga gaaagaaacc aaattcacag ctgggtggggc agactgtgtg tgggtggggg  tggggggctc ccactctat caactctcc cagcaagtc ggaacccag gtagccctt ggaagatgacc gttgcgttga  ggacaatgg ggaacttggc accggctgc ctgtgtgtt gacattca gggggggcag gaaagttaag gaaagtgtg  gtgggattcc aaggtgaagg ccaactgaat cgtgggggga gctttatg cagttatgg ggaaggaccc tggcaltg  caaaagaaag gcccctgggg tgaagagtg accatcacat ttggaagtg atcaaacact gttctctta tggggctctt gcttaagt  ctatgtgag aacacaggcc cggccccctc cctgtgagag ccatagaaat attctggctt gggggcagcag tccctctc  cctgtatcat ctgcccctgt tctacact accgggtgtat ctccaatcc tctccaatt ttatccctt attactta agagctccaa  tggggctctcc agctgaaagc cctccgggga ggcaggtgtg aaggcaggca ccacggcagg ttctccgga tgaatgaccc  tagcagggtc tcaagggttc ccactagat gcaagatga cctctgcg cctcacagc agtgacacct cgggctctt  ccgtgtctat ggtgaaat cctggaaat alggatcaca tgaagggttc tgtgtctt tggaggggtt gggggatatt tgtttgt  ttttctgag gtccatgaa aacagccctt ttcaagcc attgtctg tcatgttc catctgtct gagaagca ttcttgtt  attagcatt tgaacatct cggccattca aagcccccatt gttctgca ctgttggcc agcataacct clagcatga ttcaaggcag  agtttaacc tgaaggcag gaagtataa atgaggggtg gttctctgc agatactta atcacatcat tgtttttt alaaactac  ccataagct ttaccttta aagaaaaatg aaaaaggtta gttgtgggg gccgggggag gactgaccg ttcataagcc  agtagctg agctgagat gttcaataa accctttgat attctcaaa aaaaaaaa aaaaaaaa  MFVASERKMR AHQVLTFLLL FVITSVASEN ASTSRGCGLD LLPQYVSLCD  LDAIWGIVVE AVAGAGALIT LLLMLLLVR LPFIKEKEKK SPVGLHFLFL  LGTGLGLT FAFIQEDET ICSVRRFLWG VLFALCFSCSL LSQAWVRRL  VRHGTGPAGW QLVGLALCLM LVQVIAVEW LVLTVLRDTR PACAYEPMDF  VMALIYDMVL LVVTLGLALF TLCGKFKRWK LNGAFLITA FLSVLIWVAV  MTMYLFGNVK LQQGDWNDP TLAITLAASG WVFVIFHAIP EIHCITLLPAL  QENTPNYFDT SQPRMRETAF EEDVOLPRAY MENKAFSMD EHNALRTAGF  PNGSLGKRPS GSLGKRPSAP FRSNVYQPT E MAVVLNGGTI PTAPPSHTGR HLW  gtggctcga ggtgggga gggccggccc ctgagctgg ggaagaaag cagggacgg gctccgggag gcagggtcgg  ctggagga cggctctgc ttgctctac acttgcaaa atgtctcga gttactac atagcatatt ggtatataa aatgaaalg  aaggaccaa aataacata atlgaaagca gtaaaagtga aatlaataag gaagatcatc agtcaaggaa gacccactgg  agaggacaga aatgaagca gttttatc atgtgtatt cagcaggct tctgaaat taactaaaa latgactgt ctctctcag  agaactgtc tttagtac cagttagc aaacaaaca gcccctagac gtaataic tgtatctt gatcalact gggaaaaat  tataaatat ccttacata ggaatgagaa gaaaaaac ctgtcaaaa ttatggat attttgcat ttactagca ttctgtalc</p>	P	Homo sapiens
600	190602	G Protein- Coupled Receptor GPCR150	NM_014373	<p>gtggctcga ggtgggga gggccggccc ctgagctgg ggaagaaag cagggacgg gctccgggag gcagggtcgg  ctggagga cggctctgc ttgctctac acttgcaaa atgtctcga gttactac atagcatatt ggtatataa aatgaaalg  aaggaccaa aataacata atlgaaagca gtaaaagtga aatlaataag gaagatcatc agtcaaggaa gacccactgg  agaggacaga aatgaagca gttttatc atgtgtatt cagcaggct tctgaaat taactaaaa latgactgt ctctctcag  agaactgtc tttagtac cagttagc aaacaaaca gcccctagac gtaataic tgtatctt gatcalact gggaaaaat  tataaatat ccttacata ggaatgagaa gaaaaaac ctgtcaaaa ttatggat attttgcat ttactagca ttctgtalc</p>	A	Homo sapiens



601	190602	G Protein- Coupled Receptor GPCR150	NP_055188.1	<p>ttttactttt ggtaaacatt tccattatatt tgaatttcag ggatttggta cttttaagca ttaggttcac taaataccac atcttgccat  ttactcaat tatttccrtt acttatggct ttgtcattat tccagtttnc ctagacagctt gtagagatta ttgocctgaat ttcttaaaa  caaccaagct ttatttaag tgcataaat tattttatt cttacagta attttaattt ggatttcagct ccttgcttat gttttgggag  accagccat ctaccaagc ctgaaggcac agaaagctta ttccgctcac ttccgcttctt algtcagcat tcaaggttacc ttggctgcat  ttttcagct gtagatttta ttgtagctt tcaaacctg ttggggaagaa gttactct ttggacaggg taccagata acttctata  tgaatgaac tatctatatt ttcttttt catccacac cagttatct gtagagacta aaaaatatt cttatcaag cttatgct  gttttcag taccgtgta ccatttggac tactcaggt aatcattgt ttacttaag ttacattcc agcatatatt gtagatgaata  ttccctggtt alacttgc aalagttttc tcatgtctac agtgtattgg tttaattgic acaagcttaa tttaaagac atttgattac  ctttggatcc atttgtaac tggaaagctt gcttcatcc acttaaat cctaatctt agcaaatgta aaagccctata tcaataaga  ttgttaata ttataata aaagttaac cttgcataag atcataatt tatgaacaga aagaactcag gacatatata aaaaataact  gaactaaaac aactttggcc ccttgactga tagcatttca gaaatgct ttgaagggc tatccaggtt attaatagtt gttttattt  aaaaacaaaa taattccaag aagttttat agttattcag ggacactata ttacaatat tactttgta ttaacacaaa aagtgataag  agttaacatt tggctatct gatgttgg ttactcaaaa aaactactgg algcaaacgt ttalgtaaat ctgagatttc actgacaact  ttaagataic aacctaaaca tttttataa algttcaaat gtaagcaaga aaaaaaaa</p> <p>MTALSSNCs FOYQLRQTNQ PLDVNYLLFL IILGKILLNI LTLGMRKNT  CQNFMEYFCI SLAFVDLLL VNISILYFR DFVLLSIRFT KYHICLFTQI ISFTYGLHY  PVFLTACIDY CLNFSKTKL SFKCQKLFYF FTVLIWISV LAYVLGDPAL  YQSLKAQNAY SRHCPFYVSI QSYWLSFFMV MILFVAFITC WEEVTTLVQA  IRITSYMNET ILYFPSSHS SYTVRSKKIF LSKLIVCFLS TWLPFVLLQV IIVLLKVQP  AYEMNIPWL YFVNSFLIAT VYWFNCHKLN LKDIGPLDP FVNWKCCFIP  LTIPNLEQIE KPISIMIC</p>	P	Homo sapiens
602	190623	Melanopsin	AF147788	<p>ggttccacc catcagacca cagcttcacag ccaggagacag ttgggacagca gtagtcatag gagacatctg gagcctgaag  cttccacgc gggccctctg gcttccattgg alggcagggct ccgggacagac gagcctgcccag gtgggtgtgg gtagcaaaagg  tttggagcaaa gagcggccatg gggagcctcc ccagtggggac agaaagcacag gtagtgaagggg gttggggccct gtagtgaatct  cagtgctacc cgcacaaggctt gtagtgacag gcccagtgag aaaggaacatt gtagtgaagg acgtggggctt ccaaaaggccc  caggcctgggg gttccgagtc ctctgactt tccctgaggt gctcttgg gggcctgggg accctgggta ttgggaltcc cggcctcalt  gtccacctga caagcacttc tccctggac tccgtgctt gctccatcac ctgcacccct tctaattag caggttgggag  agtgggggttcc acattgaatg gtagcgttgg ttgactcaga attgctcca gctgtgagaga attgttaaac cctacattia  aaacgcaagc agctgggcatg gtagcctagg gacgaagaagaa aagccggccc ctacggctca cccggcccc aggggtggccct  ctgtgagcca aagccctgaa gtaggaagagc ctacggagaga aggcagctctg agccatgggg ttggcagctgc aggaagtaca  gctcccgctc ccagtgagggc tggctccact tctctgctc aaaaaggggg ctccagagaga acgttttga aagactgggg  gaaacttctg aagagtgagtg alactctgt ccactccagg gctccaacac tccacgact gttgcagagac algggcccca  cttagagaga ccgcctggcc gtcgggctcc cctaaacgca gctcttgg gtagggccctag cccggagcagc cctccctggga  agccgtgtgt tcaagctccc ttctccag ctccctgctc ctctctaaag acaggggcaag gggtcagggccc gggtgtccct  ccacttctga catcagta acttgagca ggccctgcaag cctgggtgag cttggggac tctccaala aggttttaaa aaatcttat  actttaaaa ttctggccgg gcccagtggg tcaagcctgt aatcctgggca cttggggag cggaggtgggg ttgaltacct  gaggtcagaga gttcgaagact agcctggcca acatgggtgaa ctctgctc tgcataatat acaaaaata gccaagggtgt  gtggcagagtg cctgtaatcc cagctactc gtagggctgag gtaggggtgag ttctggacc ttggagggcgg aaggttgcagt  gagctgagat tgcaccattg cactccaggc ttgggtgacag agcagaagact tctcaaaaa aataaaaaa aaaaaataa  actttctat caaaaaacaa gcaaaagccc cctcgtgagc tgaatcac ctactctctg tcttccatc ttgtgaagggg</p>	A	Homo sapiens

[illegible]

[illegible]

[illegible]



604	190627	G Protein- Coupled Receptor GPR41 & GPR42	NM_005304	GTWAAA WVPL PTVDVPDHAH YTLGTVILLV GLTGMLGNLT VYTFCSRSL LRTPANMFII NLAVSDFLMS FTQAPVFFTS SLYKQWLFGE TGCEFYAFCG ALFGISSMIT LTAIALDRYL VITRPLATFG VASKRRAAFV LLGVWL YALA WSLPPFFGWS AYVPEGLLTS CSWDYMSFTP AVRATYMLLC CFVFLPLLI IYCYFIFR AIRETRALQ TFGACKNGE SLWQRQLQS ECKMAKIMLL VILLFVLSWA PYSVALVAF AGYAHVLTYP MSSVPVIAK ASAHNPITY AITHPKYRVA IAQHLPLGLV LLGVSRRHSR PYPYSRSTHR STLTSHSTNL SWISIRRRQE SLGSESEVGW THMEAAAVWG AAQANGRSL YQGLEDLEA KAPPRPQGHE AETPGKTKGL IPSQDPRM	sapiens
				atggalacag gccccgacca gctctacttc tccggcaalc actgggtcgt ctctcgggtg taactctca ctttcctggt gggtctcccc cicaacctgc tggccctggt ggctctcgt ggcaagctgc agcccgccccc gggtggccgtg gacgtgctcc tgcataacct gaccgctcgt gacctgctc tgcgtcgtt ccggcttcc cgcattgggtg aggcagagccaa tggcaltgcac tggccctcgtc ccttcacct cggccacac tcttgattca tctctcac caccatcat ctaccgccc tcttcctggc agctgtgagc attgaacgt tcttgaggtt ggccaccaca cgtgtgtaca agaccggcc gggtcggggc caggcagggtc tgggtgaggtt ggccctgctgg cgtgtggcct cgtctcacg cagcgtggtc taccgtacag aattctcagg ggcacatctc caccagccagg gccaalgg gacctgtac cgtggaggtt ggaaaggaca gctagccalc ctctgccc gggtcgtggg gctgggtggt gctctcttg tggccgct gataccac agctactgt acagccgctt gggtgggtc cgtggcagg gggtcaggcca ccgcccggcag aggggggtt cggggctgtt ggccggccag cgtctcaact tctgtcgt cttggggcc tacaacgtt ccatgtctt gggtatata tccgtggaaa gccggcag gaggatctac gtagcgttc taccgacct gaactcctgt gtcgacct ttgtacta cttctctc tccgggttcc aagccgact tcatgagctg ctgagaggtt tgttgggtt cgtggggcag tggcagag agagcagcat ggagctgaag gaggagaagg gaggggagga gcagagagcg gaocgaccag ctgaaagaaa gaccgtga cactacag gctgtgaac tgggtggcag ggtgctgtg ctgaaagta g MDTGPDSYF SGNHWFVSF YLLTFLVGLP LNLLALVVFV GKLRQRPVAV DVLLNLNTAS DLLLLFLPF RMVEAANGMH WPLPFLCPL SGFIFFITY LTALFLAAS IERFLVAHP LWYKTRPRLG QAGLVSVACW LLASAHCSV YVIEFSGDIS HSQGTNGTCY LEFRKDLAI LLPVRLEMAV VLFVVPLIIT SYCYSRLVWI LGRGSHRRQ RRVAGLLAAT LNFLVCFGP YNVSHVVGYI CGESPAWRIY VTLLSTLNSC VDPFVYFSS SGFQADFHEL LRRLCGLWGQ WQESSMELK EQKGGEEQRA DRPAERKTSE HSQGGCTGGQ VACAES caagactgt cctctgct gactaaca gattggagcc atggcttgg agcagaaca gtaacagat tattatag aggaaaatga aatgaagc actatgact acagtcaata tgaactalc tgaataaag aagatgtcag agaattgca aaagtcttc tccgtatt cctcaata gttttgtca ttggactgc aggcattcc atgttagtgg caattatgc ctattacaag aaacagagaa ccaaaacaga tgtgtacalc ctgaattgg ctgagcaga ttactcct ctactctc tgcctttt ggctgtat gcagttcag gggtgggttt agggaaaata atgtgcaaaa taactcagc ctgtacaca ctacattg tctctggaat gcaattctg gctgtatca gcatagacag atatgtgca gtaactaag toccaagcca atcaggagtg ggaaaacal gcgtgaltat cgtttctgt gtctggatgg cgtccatct gctgagacata cccagctgg ttittatag agtaaatgac aatgtaggt gcaitccal ttccccgc tacctagaaa calcaatga agcatgtt caaatgttag agatcgtag tgaattgta gtaoccttc ttattggg ggtgtgctac ttatcacag caaggacat calgaagtg ccaaacatta aaatatctg accociaaaa gtctgtcica cagctgtat agttttcatt gtcactaac tgcctataa calgtcaag ttctgcagag ccataagacat cactactcc ctgatacca gctgcaacat gagcaaacgc atggacalcg ccatccaagt cacagaaagc atgcgactct ttacagctg ctcaaccca atccttatg	Homo sapiens
605	190627	G Protein- Coupled Receptor GPR41 & GPR42	NP_005295.1		Homo sapiens
606	190701	C-C Chemokine Receptor 11	NM_016557		Homo sapiens

607	190701	C-C Chemokine Receptor 11	NP_057641.1	MALEQNQSTD YYEENEMNG TYDYSQYELI CIKEDVREFA KVFLPVFLTI VFVIGLAGNS MVVAYAYYK KQRTKTDVYI LNLAVADLLL LFTLPFWAVN AVHGWVLGKIMCKITSALYT LNFVSGMQFL ACISDRYVA VTKVPSQSGV GKPCWICFC VWMAAILLSI PQLVFYTVND NARCIPIPR YLGTSMKALI QMLEICIGFV VPFLMGVCY FITARTLMKM PNKISRPLK VLLTVVIVFI VTQLPYNIVK FCRADIYS LITSCNMSKR MDIAIQVTES IALFHSLNP ILVYFMGASF KNYVMKVAKK YGSWRRQRQS VEFPFDSEG PTEPTSTFSI gatttgggga gttatggcc agtggcccccag tgaacggggg gggaaagtcig cgtgtatcat aaggacclag ggactccgag ctggccctga gaaacccitgg agccggagtg ctggccitac gggtctgcact cctcaactct gctccaagc agccggctgag ctcaactct ggcgccaggg cgttcgctgc gggccagggac ggcctlagta cccagttctt gggctctc ttcagtagct gtttgaag ctccacggca gttcccgag gctagccitgg caacaaaact gggtgtaaacc gttgtatct aggctctgic cccacgaaca tgaactagag gtaccitggc algcagtagtg ccgtagagcag caccagtagcc accatgaala aggcagcagg cgggggacaag ctaggcagaaac tcttcagctt ggtcccgag ctctggagg gggccaacac ggtgtgtaac ggctctgic agcttccgga ctgtgtgtgg gtagctgggg gtaggttgc gtagggggc cggccaagac atccccggg caggggggg gcaagagagg cggacacaga gggccgggg gggccgggg cggaitctca tcaagcgttgg gtagtgggg gttgtggccc tgggttggg gggaacactg ctgttctct accitgtag gtagcagcag ggtctggggc agtctctat caactctc gtaccaac tggcgctgac ggactttcag ttgtgtctca ccttggcctt cgggggggg gtagaacgctc ttgacttcaa atggcccttc ggcaaggcca tgtgttagat cgtgttccalg gtagcgtoca tgaacalgta cggccagctg tcttctca ctggccatgag tgtgacggc laocattcgg tggccctggc tctgaagag caccgggacc gtaggacagg ccgggggggac tgcctggcc ggagccgggg gtagcagctgc tgcctcgg ocaaggcgt gttgtgttgg atctgggctt tggccggct ggccctgctc cccagtcca ttcttccac cagcgttcaag gtagtgggg gtaggctcgg cctgtgtcgt ttcccggaca agttgtggg ccgggacagg cagtctggc tggggctctca ccactggcag aaggtgtcgt tgggtctcgt gctggccgt gggcalcatla tctgtgcta cctgtctgc gttggcttca tggccgagcc cggcggggg ggggaccaaag gtagggggc ggtaggggga gtagggccga ccggggggc cgtcaacc cttgggggaga ctgtctgaagg tcaacaaic agtggacalc gttgtcgt ccttctct gttgtggctc cccaacagg cgtcaacc cttggggcalt ctacatagt tcaagcgggt ggccttcagc caggagatatt tctgtgcca ggtatagcgg ttccctgtga gctgtgtcct agcgactoc aacagctgcc tcaacccgt cctctactc ctctggcc gcgagttccg caggcgctc aaggcgctc tggcgcgcat cggcgctcct tggatcaca gcalggccc ctacccgg actaaccagg cgggagcagg gtagcagggg cttgacggccc cggcgccc ccacggggc	P	Homo sapiens
608	190705	G Protein- Coupled Receptor SALPR	NM_016568	gatttgggga gttatggcc agtggcccccag tgaacggggg gggaaagtcig cgtgtatcat aaggacclag ggactccgag ctggccctga gaaacccitgg agccggagtg ctggccitac gggtctgcact cctcaactct gctccaagc agccggctgag ctcaactct ggcgccaggg cgttcgctgc gggccagggac ggcctlagta cccagttctt gggctctc ttcagtagct gtttgaag ctccacggca gttcccgag gctagccitgg caacaaaact gggtgtaaacc gttgtatct aggctctgic cccacgaaca tgaactagag gtaccitggc algcagtagtg ccgtagagcag caccagtagcc accatgaala aggcagcagg cgggggacaag ctaggcagaaac tcttcagctt ggtcccgag ctctggagg gggccaacac ggtgtgtaac ggctctgic agcttccgga ctgtgtgtgg gtagctgggg gtaggttgc gtagggggc cggccaagac atccccggg caggggggg gcaagagagg cggacacaga gggccgggg gggccgggg cggaitctca tcaagcgttgg gtagtgggg gttgtggccc tgggttggg gggaacactg ctgttctct accitgtag gtagcagcag ggtctggggc agtctctat caactctc gtaccaac tggcgctgac ggactttcag ttgtgtctca ccttggcctt cgggggggg gtagaacgctc ttgacttcaa atggcccttc ggcaaggcca tgtgttagat cgtgttccalg gtagcgtoca tgaacalgta cggccagctg tcttctca ctggccatgag tgtgacggc laocattcgg tggccctggc tctgaagag caccgggacc gtaggacagg ccgggggggac tgcctggcc ggagccgggg gtagcagctgc tgcctcgg ocaaggcgt gttgtgttgg atctgggctt tggccggct ggccctgctc cccagtcca ttcttccac cagcgttcaag gtagtgggg gtaggctcgg cctgtgtcgt ttcccggaca agttgtggg ccgggacagg cagtctggc tggggctctca ccactggcag aaggtgtcgt tgggtctcgt gctggccgt gggcalcatla tctgtgcta cctgtctgc gttggcttca tggccgagcc cggcggggg ggggaccaaag gtagggggc ggtaggggga gtagggccga ccggggggc cgtcaacc cttgggggaga ctgtctgaagg tcaacaaic agtggacalc gttgtcgt ccttctct gttgtggctc cccaacagg cgtcaacc cttggggcalt ctacatagt tcaagcgggt ggccttcagc caggagatatt tctgtgcca ggtatagcgg ttccctgtga gctgtgtcct agcgactoc aacagctgcc tcaacccgt cctctactc ctctggcc gcgagttccg caggcgctc aaggcgctc tggcgcgcat cggcgctcct tggatcaca gcalggccc ctacccgg actaaccagg cgggagcagg gtagcagggg cttgacggccc cggcgccc ccacggggc	A	Homo sapiens

609	190705	G Protein- Coupled Receptor SALPR	NP_057652.1	<p>gggagccgg accgtctta ctaccacct ggcgtctggg tctacagcgg gggcgctac gacctgctgc ccagcagctc tgcttactga cgcaggcttc aggccagggg cgcgcctgcg gggcaaggcg gctctccccc ggcggtaaaag aggtgaaagg algaaaggagg gctggggg</p> <p>MQMADAATIA TMNKAAGGDK LAELFSLVPD LLEAANTSGN ASLQLPDLWW ELGLELPDGA PGHPGSGG AESADTEARV RILISVYVWV VCALGLAGNL LVLYLMKSMQ GWRKSSINLF VTNLALTDQ FVLTLPFWAV ENALDFKWPFF GKAMCKIVSM VTSNMVYASV FFLTAMSVTR YHVSASALKS HRTRGHGRGD CCGRSLGDSC CFSAKALCVW IWALAALASL PSAIFSTTVK VMGEELCLVR FPDKLLGRDR QFWLGLYHSQ KVLGFLVPL GIILCYLLL VRFIADRRAA GTKGGAUVAG GRPTGASARR LSKVTKSVTI VVLSFFLCWL PNQALTTWSI LIKFNAPFS QEYFLCQVYA FVSVCLAHNSCLNPVLYC LVRREFRKAL KSLLWRJASP SITSMRPFTA TTKPEHEDQG LQAPAPPHAA AEPDLLYYPP GVVYSGGRY DLLPSSSAY</p>	P	Homo sapiens
610	190711	G Protein- Coupled Receptor GPR85 (SREB2)	NM_018970	<p>ggcagagga ttitactgt gctcaagat cagattatta cgtagagaa gatttttati ttgtttica ttacagatt attataaagc aaaaagcatg cagaaaaaga agcagagcgti ttacatiggg aattaatgaa agcgtgtctg ctagtittgg gtagggagaa tgggaagtig ttgcttaaaa ttatatac cttcacaaa caaaactcti cggaaatggg aaaaataagaa aatgcaltgat tctagaggca ttcttaagca cccagctgc aggccttggg gtgtctggg talcatocga cgtttggagc tggttagggc ttactggag cttcattct ggaaagccti acaagactga ggaatcatag actgcgaac accgggaacg gtctcttgc agcacagaag caatctcti cccatcttc gcatattctg atggcaaac aagtggaaga aaagaggaag calgactgca gatcagatca gttctcttg tggattat ttcatgaaa algataggat clacttttc ctgttctta latcatagat algagactg actgaggctg talcttalc ctccatcat ctatggcga ctatggcat gcagctgaca acatttgcg aaatctctg ccttaacag cctttctgaa actgacttc ttgggttica laalaggagt cagcgtggg ggcaacctoc tgaictocat ttgcttagtg aaagataaga octtgcatag agcaacttac tactctgt tggactttg cgttcagat atctcagat ctgcaattg ttcccatt gtgtcaact ctgtcaaaa tggcttaac tggacttag ggactctgac ttgcaagtg atggcttgc tgggggttt gtctgttgc cacactgt tcaictcti ctgcatcagt gtcacagat acttagctat cggccatcac cgtcttata caaagaggt gaoctttgg acgtgtctg cgtgtactg talgtgtg actgtctg tggccalgcc atttccccg gttttagagc tgggcaacta ctaltcalt agggaggaag alcaalgcac ctccaacac cgtctcttca gggctaaiga ttacttagga ttatgtctg ttctgtct catctctta gccacacagc ttgtctact caagctgala ttttctgccc acgactgaag aaaaatgaag ccagtcocagt ttgtagcagc agtcagccag aactggacti ttalggctoc tggagccagt ggccaggcag ctgccaattg gctagcagga ttgggaagg gtcacacacc acccaacttg ctgggcatca ggcaaaatgc aaacaccaca ggcaagaaga ggclattgt cttagacgag ttcaaalgg agaaaaaag cagcagaalg ttctatataa tgaactttct gtttctaac ttggggggc cttactgtgt ggctgtgtat tggagaggti ttgcaagagg gctgtgla ccaaggaggat ttcaacagc tgcgtctggt algagtttg cccaagcagg aatcaatcti ttgtctgca ttitctcaa caggagagcig aggcgtgti tcaagcagc cctttttac tgcagaaaaa ccaagttacc aagggaacct tactgtgta latgaggag calctgtaaa tcttagcct tgtgaaaact aactctct gctgagcaat tggggcccat agccatatt tgaagaagaa ttcaagaalg gaalcaagcag tttaaggat ttgggcaaca ttctgctgic ttgcaalag ttacattata alccatttt aaatctcaga gtgatctgc tgaactgocag caaagggttg laataagaa gggaactgaac cactgoccta agtttctta tgggtcaaa aactagataa tgaagtagc aggtgtcaag talcagct aaatgtctg talgtacta calatgaaaa aacataaaaa aacatagc attggacatc taalaatati aagtgtacat gaggtaaalgt tgtgataaa aactaatit agaaagttag agacttaaa acatttata ctactltgt tttgcagaaga ctaaaatati tggggactia aagtagtga alccactaaa gacgtgcca tgaattatg gaalacaca cttaaaaac cgctctgtaa gttctgggga gcatccaag gcagtatati gggtccaat agagtttact tttttgat taalacatig ctatttctaa</p>	A	Homo sapiens



611	190711	G Protein- Coupled Receptor GPR85 (SREB2)	NP_061843.1	<p>alaccacatt cctcalciac tagiaagatt gciagcattg aaciagiata tgggtttt gtigattgg tataagttt ttcaaltca  tttatittt acaaalgiac galattggc tgggaggaac caltaalgg accagccgt cacacigag cagtttcaat aalgcagaat  aaatacatg tgcctaaag ggtaicag tatccitcal ctatthag acigagagcaa alagccaagg gaaatcaaat cagtaaciggg  tcalggicat gcalciaaaa gicagaggaa galcatttat tacttttcc ttttttcc acatgggttg aaactlaaag tgcacalcac  tgaataaag agattttct clacgggtg clacccttc taaacigtic taagaagcag gacgtigag tagtttala tttaaagica  gcgticaagg ggaagaccaca gccitagtat gacalcicg acaatttig aagcatttat tciatigaa gacacagicti gtttialacti  tcigcacatt cagtgatig gtaatttaaa ttatitcag ttaactgt gaaagcttat attatgttt cgggtattt agaaatatal  tagagctgt gagtcatt cttaagata cagatgtg aacticaata taaagtigca ttgccaana ttaccctg lagccigtia  attttctga aataagttt acatttttg cacatacaa cgtttttt aatttggag gcaagacaa actaggaga ctagcttat  tatgttttg cttttgat ctgtagctia clatitca gactggaaat giatgaatga taatcaaat aatgcigata aactigacata  atattatcig taaaagcatt atttggatg ttattatcat catocctcia ttatcttaa alggcagtag tattagaga tggtaaccig  cttagtaat tggctcagaa tttaataa aacalcacac tttaattgg agcataglac catagaaat tggggctcia aatalacaac  tigliaagaag aalggtttac actaacatta tgaacaaact agaaaaagt attattttg ttgctttct gtgtttgt ttatgggtg  gttttctga agtttatit tttttgta ttgataat aagattaga atctaatac acagaattcc alattgctat agtactcig  taaagagaat atcaataaa ataggaaa taaatcag aatgttca atggtataa aaaaaaaa aaaa  MANYSHAADN ILQNSPLTA FLKLTSLGFI IGVSVVGNNLL ISILLVKDKT  LHRAPYYELL DLCCSDILRS AICFPFVFNs VKNGSTWYTG TLTKKVIAFL  GVLSCFHTAF MLFCISVTRY LAIAHHRFYT KRLTFWTCLA VICMVWTLVS  AMAFPVLDV GTYSFIREED QCTFQHSFR ANDSLGFMLL LALLATQL  VYLKLIFFVH DRRKMKPVQF VAAVSQNWTF HGPASGQAA ANWLAGFGRG  PTPPTLLGIR QNANTTGRRR LLVLDEFKME KRISRMFYIM TFLFLTWGP  YLVACYWRVF ARGPVVPGGF LTAAVVMSSFA QAGINPFVCI FSNRELRRCF  STTLLYCRKS RLPREPYCVI</p>	P	Homo sapiens
612	190725	G Protein- Coupled Receptor GPR26	LG93120	<p>aggclagtg agctcttc caccgtgccc atcggtccc actgggggt gcttocaag tgcitggcgt acagaaggc  cgcatcgac cctttgtg actcttact ggcacaccag taccgcaaa gctgcaagga gattctgaac aggtctcgc  acagacgtc catcacicc tctggctca caggcagc tcacagccag aacattcgc cgggtctiga g  MNSWDAGLAG LLVGTMGVSL LSNALVLLCL LHSADIRQA PALFTLNLTC  GNLLCTVNM PLTLAGVVAR QPAGDRLCR LAFLDTFLA ANSMLSMAAL  SIDRWVAVF PLSYRAKMLR RDAALMVAYT WLHALTFPA ALALSWLGFH  QLYASCTLCS RRPDERLREA VFTGAFHALS FLFSFVLLCC TYLKVARFHC  KRIDVITMQT LVLLVDLHPS VRERCLEEQK RRRQRATKKI STFIGTFLVC  FAPYVITRLV ELFTVPIGS HWGVLSKCLA YSKAASDPFV YSLLRHQYRK  SCKEILNRLH HRSIHSSGL TGDHSQNIL PVSE</p>	A	Homo sapiens
613	190725	G Protein- Coupled Receptor GPR26	LR26	<p>atggccaaca ctaccaggaga gccitaggaga gtagcggcg cttgtcccc accgtccgca tcaagtatg tgaagcgtg  actgttggga ctgattatg gcgttagcct ggcgggtaac gccatttgt cctgtctgt gctcaaggag cgtgccctgc  acaaggctcc ttactctc ctgtggacc tgtccttggc cgttggcata cgtcttggcg tctgtccc ctltgtcgt gcttctgic  ggcacggctc ttatggacc ttatggacc ttagtggcc ttatggcc ttatggcc tctgtttg ctccalcg gcttcalgc  tgtcttgc cagcgtacc cgtacalg ccacggc tcacggc tcacggc tcacggc tcacggc tcacggc tcacggc tcacggc  ggcgctgtca tctgcatggc ctggaccctg tctgtggcca tggcctccc accgtctt gacgtgggca cctacaagt  tattcggag gaggaccag gcalcttga gcatcgctac ttcaaggcca algcacagctt gggcttcalg ctatgttgg cigtctcal</p>	P	Homo sapiens
614	190741	Sreb3	NM_018969	<p>atggccaaca ctaccaggaga gccitaggaga gtagcggcg cttgtcccc accgtccgca tcaagtatg tgaagcgtg  actgttggga ctgattatg gcgttagcct ggcgggtaac gccatttgt cctgtctgt gctcaaggag cgtgccctgc  acaaggctcc ttactctc ctgtggacc tgtccttggc cgttggcata cgtcttggcg tctgtccc ctltgtcgt gcttctgic  ggcacggctc ttatggacc ttatggacc ttagtggcc ttatggcc ttatggcc tctgtttg ctccalcg gcttcalgc  tgtcttgc cagcgtacc cgtacalg ccacggc tcacggc tcacggc tcacggc tcacggc tcacggc tcacggc tcacggc  ggcgctgtca tctgcatggc ctggaccctg tctgtggcca tggcctccc accgtctt gacgtgggca cctacaagt  tattcggag gaggaccag gcalcttga gcatcgctac ttcaaggcca algcacagctt gggcttcalg ctatgttgg cigtctcal</p>	A	Homo sapiens

615	190741	Sreb3	NP_061842.1	gagcagciacc calgcigtct acgggcaagct gctctcttc gagtatactc accgcaagat gaagccagtg cagatggctc cagccalcag ccagaacttg acattccatg gtccggggc caccggccag gctcigcca actggatcgc cggctttggc cgtggggcca tggccaacac cctgctgggt atccggcaga atgggcagtc agccagccgg cggctacttg gcatggacga ggicaaggggt gaaaagcagc tggggccgcat gtctacgcg atcacacgc tcttttgt cctciggica ccttaccg tggcctgcta cggcgagtg ttgtgaag cctgtgcgt gcccacgcg tacttgcca cgtcgtttg gatggcttc ggccaggctg ccgtcaacc aatgtcgc ttctgccta acaaggacct caagaagctg ctagggactc agccccctg ctggggcaca ggaggggccc cggctccag agaacctac tgtcagtg ga MANTTGEPEE VSGALSPPSA SAYVKLVLLG LMCVSLAGN AILSLLVLKE RALHKAPYYF LLDLCLADGI RSAVCFPFVL ASVRHGSSWT FSALSCKIVA FMAVLCFHA AFMLFCISVT RYMAIAHHRF YAKRMTLWTC AAVICMAWTL SVAMAFPPVF DVGTYKFIRE EDQCFEHRY FKANDTLGFM LMLAVLMAAT HAVYGKLLLF EYRHRKMKPV QMVP AISQNW TFHGPATGQ AANWIAFGF RGPMPPTLLG IRQNGHAASR RLLGMDEVKG EKQLGRMFYA ITLLFLLWS PYIVACYWRV FVKACA VPHR YLATAVWMSF AQAAVNPVC FLLNKDLKKK LRTHAPCWGT GGAPAPREPY CVM	P	Homo sapiens
616	190742	G Protein-Coupled Receptor H7TBA62	E32367	gagctcgtc cacagactag agcagggaag ggggggaagc cggcgataga ggtagcagg aatgtaaat taccaggagc aggaaacaga ctaggggcat gcccaggctc acacaggccc tcalaggccc agtgttcca gtagggagga aacagggaagc tgtgacttcc tctcttct cctctcgc tcttagctc aaggctacg cgtctgagat gaattccaac cgttttagt tggcactgt ccctggggcat ggtaalagc tctcgtacc cttctgccc aaacaccca aactctct tgaataat altcalcaa attctattt cacatgatt cttctatgc atcaltgcc tctgtgaa gtagacttacc tgaataattt aagcaagaaa acaggcttag gggagtaaa gtaacttccc agtcacacgg clagttagca gcaggctcgg gactccggcag cctccgctc ttctctct ggacacccat gctgattccc tgcctatg ccacttoca ggcccctgc ttggggccc aagggaacac ttctgcaga ggaggggggc ctgcacag ttggaaacag aggcagctct agtttggctc cgtcactc tgggacagg aaactccag ctctctctt ggggtggagg ctggggctg cctccalag cggggtaact ctcccttc cctccctct cggcattta gaggccctc laccggggc cgcaltgaca tatacctgg cattcaggct gtcctcggc cggcccacc taccaccaat ctgaccaac aggaaagggg tgggtgtcc ttccacac cctccctc aggtgtggc aggtgtggc gtagggcagg gctcaccaga ggcccagag aagcacttaa ttccagcc tcttccag agccttcagt ggccctcggc agtctggcag acatitgag acctctctc tccagccac caatctcga tgcctgcga tggccacat caatctct gctctccac ccaatctct cggggccaat gctccggag gcaggtgtct gaggtcgtat gatctccga tgcctgcca altccagcc ctagggctca tgggtgccc ggccatggg ctgtgggggg ccattggctt gctgggaaat ttggcggctc tggggactt gtagtaactt gcccggagag cccctggcc acctcagac acctcgtct tcaactggc tctgggggac ctgggacttg cactactct ccccttttg gcagccgagt cggcacigga ctttccatgg ccttcggag gtgcccctc caagatggtt ctgacggcca ctgtcccaa cgtctatggc agcalttcc tcalcacag cctcagcgtt gctcgtact ggggtgtggc calggctggc ggccagaga ccaactctc actctctg ggccgaalag ccacctggc agtgtggggc gaggctggcc tgggtgactgt gcccagact gttctgggg tggagggtga agtgtgtgt gtgcggctt gcccgtcgtc ttcccccag aggtactggc tggggggccta ccagctgcag agggtgtgtc tgggtttcat ggtggccctg gggtgcatca ccacagcta cctgtcgtc cgggcttcc tgcaggggcg gcaacggcg cggcaggctc gcaagggtct ggcccgtct gtccgcatcc tgggtgtc ctctctc tgcgtgttc ccaacatgt ggtcactc tgggtgtct tgggtgagt tgaactgtgt ccttggaaca gtacttcta tactlccag acctatgt tccctgtac tactgtct gcacacaga alagctgct caacctgt cgtactgtc tcttgaggc gtagggccc caggctctgg caggcacctt caggatctc cggctcaggc tggggccca gggtggaggc tgggtgcaac aggtggccct	A	Unidentified

617	190742	G Protein- Coupled Receptor H7TBA62	ENSP00000201 359	<p>aaagcagcga ggcagcgggt ggcgcgcaag caaccccg ggcagccggc cttaccct gctaccaac ctggacagag ggacacccgg ggcagggcg caagcgaac acactctct tctggalc caccaagt aggatcttg agtccgggg agaagctggc ctcctgcca ggcgcgag cctcaggga aaaaagctga tcttgatcc ccaactcgg gtcggcgaa tgggggaggg gggggctcag alcagagc'g gctgacaa agcttaagt tttattgga gtagggaaa agagggatct ggagaaaac cctggatta tccaaaatt gcttgacct ttatccag ttaccctc agttcagat ggaacaaaag gcttggtg tccattc'g cttcgcag aalaccagg aaaaactcc taagggttct aggtatga alcagagggtc agtggccalc tctc'gta ccacccccc acccaaac agggatccc ttgtttct cgggtatcaa ggcacaaaat ggcagcttcc cctgctca ccttacalc tca'ggtgga cca'ggaac ttgctggctg caga'ggcctc agctgcacaaa gctgtagttc cctgaa'ggg algccagggt gggggtatg ctggaa'ctc cagcacc'g caggccctgg gtagaaaacc ctgggtc'gta cgggag'ggc tg'gtgctc ccctaaac agggattgaa agaa'gtagaa ataa'gacaa gtagaa'gaca tgggtgggggt gaa'gggaggt gagc'gattaa agaggggggg gggc'ggggag aacaggc'g aggtagagcc agaaa'gag agactccaga aag'gggtc agtctccct gcccacaa'g caaagccag agta'caatt tga'gtcag agcacc'gga ttacagct tacc'cagc aaattact acctttgt acctact'gt tctcaact'g aaaa'gggct actaa'gatt taaca'gtaga atatactgt agctattt cttgtt'gt tg'gtt'gt ttgagacag agctc'gic tgcggccag gctggag'gag agtgg'gtaga tca'gctca ctgcaacct cgttccgg gtcaagcga ttctctgg tca'gctcc gaggtagc'gg gactacaggc tccg'ctacc agtcc'ggc aattttgt aattt'aa aga'gacagag ttacacata ttggccaggc tggctcaaa cctc'gacct ctat'gact gccaacctg gctcccaaa gtc'gtagt tacaggc'g agccacccga cccg'gtag ctatttct tacaccc'gt gtagaa'gga gtagag'gga tgggaggaaa taagc'g'gca gctgggagat ggggag'ggg aaccagct cagctggaa'g ggttgtagat gctc'gaa'gt gggg'gataat gaa'gctca calaa'gagac tca'gaggtt gccc'aa'g cctc'gga ggtg'gtct ccaggacag ggtcctt'gt ttgtctct at'gag'gac alca'gata aagg'gtagcc alcagaa'gga ttctagga ggcagccct agaa'ggagg gaggcagagg gaa'gagagg tagagc</p>	P	Homo sapiens
618	190743	G Protein- Coupled Receptor GPRC5D	NM_018654	<p>NSCLNPVLYC LLRREPRQAL AGTFRDLRLR LWPQGGGWVQ QVALKQ algtaaa'g actgcatga g'ccactgga gactattt tctc'gta g'ccgagggg ccalggggca tcatc'gga gtcc'ggcc atact'gga tgg'ggcac aattc'gta ccttagcat ttcttctc calg'gaa'g atcca'gact g'cagccag'g gaatgctc cccacccagc tctctct c'gag'g'g cggggcct tggagctgc ttggcctc atcag'gag tcaatcaaca aac'ggccccc gtagc'gact ttctttgg ggtcctt'gt gctc'g'gt tctagcct cttagc'at gctccaalc tag'gagct gggtcgggggt t'gtcctct tctc'ggag gacaallc'g tgcaltgta ttgg'gtcag tctg'gcaa atcattatg cca'gtagla t'gtagctc atca'gaca gagg'gagat gttg'gaa'g alga'ccct g'ccagc'caa t'g'gagctt ttg'gtactc t'g'gtc'gt cctctcc'g atggccca cactc'gt ctccaa'gccc acctc'g'g gccc'g'gga gaa'g'gag cagcag'gga ggc'gactt tacc'g'g cctc'gca lca'c'g'g ggtg'g'g'g alctc'g'g tctc'gag'g caacc'g'gag ttccag'gac agcccag'g g'gag'gccc g'c'g'g'gca ttgctc'g'g caccac'gca tgggtttcc t'g'g'g'gta calc'g'gct gagctc'gca ttctacag alc'g'g'gag cagg'g'gccc cttiaa'gg caalgc'g'g ccc'g'gacag cclacacaa cagcttccaa g'g'gag'gagc ag'gagc'g'g cag'gcccga gacag'g'gag g'gag'g'gag g'gag'g'gag ttaact'cal alg'gtactc caticagc'g cagact'g'g atcccacaca agag'g'gtt atcccag'g claa'ciaa'g ccccag'caa</p>	A	Homo sapiens

619	190743	G Protein-Coupled Receptor GPRC5D	NP_061124.1	galcaggag gaggataa MYKDCIESTG DYFLCDAEG PWGIIIESLA ILGIVVTILL LLAFLFLMRK IQDCSQWNVL PTQLFLLSV LGLFGLAF AF IIELNQQTAP VRYFLFGVLF ALCFSCLLAH ASNLVKLVRG CVSFSWTTIL CIAIGCSLLQ IIAITEYVTL IMTRGMMFVN MTPCQLNVDF VVLLVYVFL MALTFVSKA TFCGPCENWK QHGRLIIFTV LFSIIWVWV ISMLLRGNPQ FQRQPQWDDP VVCIALVTNA WVFLLYIVP ELCILYRSCR QECPLQGNAC PVTAYQHSFQ VENQELSRAR DSDGAEEDVA LTSYGTPIQP QTVDPQTQECF IPQAKLSPPQ DAGGV	P	Homo sapiens
620	190744	G Protein-Coupled Receptor GPRC5C	NM_018653	cgggagggg ggggaacct ccgaagggg cctgggac agcaccctg aagacagcca ttggccatgg gggaccaacc agagccggc cgggagcca ggaaggcat ccacaagcc ttgggtagt gctgggact ggcctctc cigtccag gggctgggc ccaggggcat gtccaccgg gctgcagcca aggcctcaac cccctact acacclgig tgaocgctc ggggcgtggg gcalcgctt ggaaggccgg gctggggcgg gcatgtcac cagcttgg ctaacatca tccgtggg cagctcccc ttggcagg acaccaagaa accgagcctg cgggggaacc aggtattct cctcgggg accctggggc tctctgct cgtgttgg tgggggga agccgactt cccactgt gctctcgg cctctctt tgggggttcg ttgccaatc gctcttgg tggggggt cagcttgg cctcaact cctgggggg aagaaaccag gggccgggg cgggggagc ttcactgg cctcgtgt gacctggta gaggatca tcaatacaga ggggctgac atcacctgg ttgggggag tggcagggg gggccicagg gcaacagcag cgcaggcctgg ggcgtgggct cccctggc cgtcggcaac atggacttg tcatggact catctagc atgctcgtc tgcggggg cttcgggg cctcgggg cctcgggg gctgttgg tgcataag cgtcgggta agcatgggt cttgtgtc ctaacacag cactctgt tgcataag gctcgggg cctcgggg aatggcggg lactaggc aacaagcag acaacagtc cactgggg gaaaccagc tggccatgc cctcgggg aatggcggg cctcgtct cttctagc atccccagg tctccagg gaaacagtc agccagagc aaagctacca gggggagcag taocccacc gggcgagg clatgagac atctgaaag agcagaagagg tcaagagcag ttctgggaga acaaggcct ttcaltgat gaggcgttg cagctagag gccgggtca ccalacagc ggtacaagg gcaagcgtc accagctgt accagccac tgaagggc ctagagcaca aagtccgtc cgaaggagc taccatca tctccacg gggccagcc aacaagcagg tgaaggcag tgcactcg acccgggg ctagagcat gactcggc cagagcca acccggccac accgggaaa gacggcaaga actcaggt cttagaac cctcagct gggactgag cagcggggc gaggagaggc gggcggatt gggggaggc ctgaggact gggccgggg aaggactt caggctct cctccccc gcaaggcagc aacatgtgc ccagatcgg aaggccctc cttctgcca gtttgggt ggggtcag ggtgtcca ccactctc agtgttgg ggtcagaga gcaaccca gctcctgg tctcggga ttctgcaac ctcaagagac ttccaggcg ctagggc tgggggtg ggtcggcag cgcctagt tctcggga ttctgcaac ctcaagagac ttccaggcg ctagggc gactgtc cttgtagg acaagggt cctaataa acattctgc ttatataa aaaaaaaa aaaa MGTQPEPLG ARMAIHKALV MCLGLPLFL PGAWAQGHVP PGCSQGLNPL YYNLCDRSGA WGIVLEAVAG AGIVTFLVLT IILVASLPFV QDTKKRSLG TQVFLGLTL GLFCLVFCV VKPDFSTCAS RRFLFGVLA ICFSCLAHV FALNFLARKN HGPRGWVIFT VALLTLVEV IINTEWLIT LVRSGEGGP QGNSSAGWAV ASPCAVANMD FVMALIYVML LLLGFLGAW PALCGRYKRW RKHGTVLLT TATSVAIWV WIVMYTYGNK QHNSPTWDDP TLALAAANA WAFVLFYVIP EVSQVTKSSP EQSYQGMYP TRGVGYETIL KEQKGQSMFV ENKAFSMDPE VAAKRPVSPY SGYNGQLLTS VYQPTMALM HKVPSEGAYD IILPRATANS QVMGSANSTL RAEDMYSAQS HQAATPPKDG KNSQVFRNPY VWD	A	Homo sapiens
621	190744	G Protein-Coupled Receptor GPRC5C	NP_061123.2	galcaggag gaggataa MYKDCIESTG DYFLCDAEG PWGIIIESLA ILGIVVTILL LLAFLFLMRK IQDCSQWNVL PTQLFLLSV LGLFGLAF AF IIELNQQTAP VRYFLFGVLF ALCFSCLLAH ASNLVKLVRG CVSFSWTTIL CIAIGCSLLQ IIAITEYVTL IMTRGMMFVN MTPCQLNVDF VVLLVYVFL MALTFVSKA TFCGPCENWK QHGRLIIFTV LFSIIWVWV ISMLLRGNPQ FQRQPQWDDP VVCIALVTNA WVFLLYIVP ELCILYRSCR QECPLQGNAC PVTAYQHSFQ VENQELSRAR DSDGAEEDVA LTSYGTPIQP QTVDPQTQECF IPQAKLSPPQ DAGGV	P	Homo sapiens

622	190745	G Protein-Coupled Receptor LGR7	NM_021634		<p>atgacatcgt gttctgtctt ctctacatc ttaattttg gaaalaattt ttctcatggg ggggacagg atgtcaagtg ctcccttggc tatttccctt gttgggaacat cacaagatgc ttgcctcagc tctgcacgt taaggggtg gacgactgag ggaatcaggc cgaatgaggac aactgtggag acaacaalg atgttccatg caatttgaca aatatitgc cagtactac aaatgactt cccaatalcc tttagggca gaaacacctg aatgttgggt cgggtcttgg ccagtgcaat gtcttgcca aggtcttggag ctgactcgt atgaaaccaaa ttacgagct gtccatcggg ttcttcaaa tggactgca atgtcactc agtgggaact aataagaaga cttctcctg atgtctcaaa gaattatcat gatctcaga agctgtacct gcaaaaacat aagattatcat ccatlccat ctatgtctt agaggactga atagccctac taaactgat ctacgtcatal acagataaac ctctcgaag ccgggtgttt tgaagaatc tcaagacta gaatggctga taattgaaga taatcaccic agtcgaatt cccaccaac attttatgga claaatctc ttatctt agtctgtatg aalaacgtcc tcaccgttt accgtgataaa cctctctc aacacatgcc aagacatcat tggctggacc ttgaaggcaa ccalatccat aatttaagaa atttgaactt tatttctcgt aglaattttaa ctgtttatg gatgaggaaa aacaataa atcatctaaa tgaataalact ttgcaccic tccagaagaact ggaatgaatg gatttaggaa glaataagat tgaataatc ccaaccgtta tattcaaggga cclgaaggag ctgtcacaat tgaatcttct ctataatcca atccagaataa ttcaagcaaa ccaatttgaat tatctgtca aactcaagtc tctcagccta gaaggatg aaatttcaaa latccaacaa aggatgttga gaccttctat gaalctict cacalattt ttaagaatc ccaatctgt gggatgacac cacalgttg cagctgtaaa ccaaacactg atggaattc atctcagag aatcttgg caagcattat tcaagagaatg ttgtctggg ttgtatctgc agttacctgc ttggaaaca ttgttcat ttgcagcga ccttatca ggtctgaaga caagctgtat gccatgtcaa tcaattict ctgctgtgcc gactgctaa tgggaalata ttattctg atcggaggct ttgacctaaa gtttctgtgga gaatacaala agcatcgca gctgtggatg gagaatctac atgtcagct tgaaggact ttggaccatc tgcacaga agtatcagtt ttactgtaa catcttgac atttggaataa tatcatgca ttgtatcc tttagatgt gtaggacctg gaaatggag aacaatctga gttctgattc tcaattggat tactgtgttt alagtggtt tcaatcatt gagcaalaag gaattttca aaaaactata tggcaccat ggaatgtatgt tccctctca ttcaagaat acagaaagta ttggagcca gatttttca gttgcaatt ttctgtgtat taatttggcc gcaatttca tcalagtitt ttactatgga agcatgttt alagtgtca tcaaatggcc ataaacagcaa ctgaataacg gaalcaagtt aaaaaagaga tgaatcttgc caaagtttt ttctttatg tatttactga tgcattatgc tggatacca ttitttctg gaaatgtt gaaatgtt tcaatgtt aggtagaat accaggtacc ataaactt gggtagtgat ttattctg ccaatcaaa gttcttgaa ccaatctc tatatctga ccacaagacc atttaagaa atgattcact ggtttggta taactacaga caaagaataa ctatggacag caaaggtag aaaaacatag ctccatcatt catctgggtg gaaatggcc cactgcagga gatgccactt gatttaatga agccggacct ttccacatc cctctgtaaa tgtcactgat ttctcaatca acgagactca attctatc atga</p>	A	Homo sapiens
623	190745	G Protein-Coupled Receptor LGR7	NP_067647.1		<p>MTSGSVFFYI LIFGKYFSG GQDVKCSLG YFPCGNITKC LPQLLHCNGV DDCGNQADE NCGDNNGWSM QFDKYFASY KMTSQYPFEA ETPECLVGSV PVQCLCQGLE LDCDETNLRA VPSVSSNVTA MSLQWNLRK LPPDCFKNYH DLQKLYLQNN KITSISYAF RGLNSLTLY LSHNRITFLK PGVFEDLHRL EWLIIEDNHL SRISPPTFYG LNSLILL VLM NNVLTLPDK PLQQHMPRLH WLDLEGNHIL NLRNLTFSCL SNLTVLVMRK NKINHLNENT FAPLQKLDL DLGSNKIENL PPLIFKDLKE LSQLNSYNP IQKIQANQFD YLVKLSLSL EGIEISNIQ RMFRPLMNLH HIYFKKFQYC GYAPHVRSC PNTDGISSLE NLLASIIQVR FVWVVSATC FGNIFVICMR PYRSENKLY AMSISLCCA DCLMGIYLFV IGGFDLKFPG EYNKHAQL WM ESTHCQLVGS LAILSTEVSV LLLTFLTEK YICIVYFRC VRPGKCRIT VLLIWTGF IVAFIPLSNK EFFKNYYGTN GVCPLHSED TESIGAQIYS VAIFLGINLA AFIIIVFSYG SMFYSVHQSA ITATEIRNOV KKEMILAKRF FFIVFTDALC WPIFVVKFL SLLQVEIPGT ITSWVVFIL PINSALNPIL YTLTRPFKE MIHRFWYNYR QRKSMDSKGQ KTYAPSFIVV EMWPLQEMPP ELMKPDLFY PCMSLSISQS TRLSYS</p>	P	Homo sapiens

624	190748	GPCR Ls190748	AX147756		A	Homo sapiens	gtctgggggt gggggaagct ggggacagggg tcaattgct gaagcaagtg ctctcalccc cctagtctct gctgatctag ttggggctcc agagtgaggga gggagaaaggc acttgaaac ttctctggcc ttaccgtctt agccalcaaa ctctgagctg gagatagta cgalgtgaca ggaactttcc ctggggctct ctggggccaca attctggcc gagagaaaga ggaaggaaiga ggtgagcacc ttctcactc ctaggggccat gttgtagagc tgcagtgcga cctctcttg ccaataggca tagatagtg ggttagagcag ggaagtggcc acccgagaga gccacaggta ccgttcagc actaggtaga ggtgacactc ctggcaggcc acctgcacaa tgcagtgat aaggtaggggg gtccaggata ggcacaaagt ccaatagaga acagacacag tacgtagagc tttagaagtc ctgggagctc gtggggatcg ataactcca gccalggctc ctgcalgtc ctgcalgtc calcttoga altctctggc ttgtcalgga ggcacttg agcalgtcg agtagaagaa gacaaagggg agcalggctg ggaagaaaggc aacgcagggag agggtaagca cgaagttaggg gtgaalaca gcaaaaggagc tgcactggcc ttgttaggca gtctctggga acatggggat tccagtgagg aggaagccaa tgaagttaga cactaacac agccggcaca tgcaggcccc ggcacggaac ccactcalga tcttaagta gcgggaaggcc tcttgatgg caaggtaact gtcaagggtg atcagcalga ccgttagggac agaggcagct gcggagggaag tacaatalgc calccgagg ctgcacaggg tctctgtgt gggccgagaa gggctggaga gctgtctgt gtagtaggcca gtagtgcca caccalcaa ggtgtcagcc acaggcagat tcaagggtga gcaagagactg acaccalcat tctgtggat caacagcagc acaggccacag ccactagtgt gtagtagga atgaltgagggg agggcaggagc agcaaggatc actcaaalg agaaagatga ttcalgtct cgaagtggca ggaacttact taccaggcca tg
625	190748	GPCR Ls190748	CAC39548.1		P	Homo sapiens	MESFSFGVI LAVLASLIA TNLVAVAVL LLIHKNDGVS LCFTLNLA VA DTLIGVAISG LLTDQLSSPS RPTQKTLCSL RMAFVTSSAA ASVLTVM LIT FDRYLAIKQP FRYLKIMSGF VAGACIAGLW LVSYLIGFLP LGIPMFQQT A YKGCQSF FAV FHPHFVLTLS CVGFPPAMLL FVFFYCDMLK IASMH SQIR KMEHAGAMAG GYRSPRTPSD FKALRTVSVL IGSFALSWTP FLITGIVQVA CQECHLYLV L ERYLWLLGVG NSLLNPLIYA YWQKEVRLQL YHMLGVKKV LTSFLFLSA RNCGPERPRE SSCHIVTISS SEFDG
626	190749	G Protein-Coupled Receptor GPR62	AF317653		A	Homo sapiens	atggccaact ccacagggt ggaagccaca ggaagtcagc gctcgttggg gttgaltctg gcagctctgc tggagggtggg ggcactctg ggcacaggcg cgtctgtgtgt cgtgtgtgtgt cgcacgcccgg gactgcgcga cgtcgtctac ctggcgcaac tgtgtgtgt ggaactgtct ggcggccgtt ccactalgc gctggggctg ctggccgcac cgcggccggg gctggggccgc gtcggccgg gcccgccgc accgctcal cgtgcacccc ctgcggccag gctcgcggcc gccgtccatgt ctgtgtctca ccgctgtgt ggcggcggtg ggaactgtct ggcgcgtctc ccgtctggc ccggccggccc cactctgtct cgtctgtct cgtctgtctg tctggctgg ggcctcggg cccttcggc cgtctgggc cctgtctggc ttgcgcgtgc ccggccctct gctgtctgg gcctacggcg gcalcttgt ggttggcggt cgcgtgtccc tgaaggcccc accggccggcg cgcgggttcc gactcgcic ggaactctg gtagccgoc ttccactt gccggccgct cggctcggcc tgcgggggggg caaggcgggc ctggcccccag cgttggccgt gggccaattt gcaagcttgt ggttgcctta tggctgcgcg tgcctggcg ccgcagcgcg ggcggcgga ggcgaagcgg ctgtcactg ggttcactac tggccttgc cggctcacc cttcctgtac gggctgtctg agcgcccc gctgttggca ctggggccgc tctctggcg tgcactgct ggaactgtgc gggcctgtcac tccgcaagcc tggcacccgc gggcacttt gcaatgctc cagaagcccc cagaggcccc tgcctagggc cctctgagg ctccagaaca gaccccgag ttggcaggag ggcggagcc cgcatalacc gggccacttg agagtctt cttctga
627	190749	G Protein-Coupled Receptor GPR62	AAK12638.1		P	Homo sapiens	MANSTGLNAS EVAGSLGLL AAVVEVGALL NGALLVVVL RTPGLRDALY LAHLCVVDDL AAASIMPLGL LAAPPGLGR VRLGPAPCRA ARFLSAALLP ACTLGVAALG LARYRLIVHP LRPGSRPPV LVLTA VWAA GLLGALSLLG PPPAPPPAPA RCSVLAGGLG PFRPLWALLA FALPALLLLG AYGGFVVAR

628	190774	Histamine H4 Receptor	NM_021624	LAGRSPAYQ GPPESSLS	RAALRPPRPA RGSRLRSDSL DSRLSILPPL RPRLPGGKAA LAPALAVGQF AACWLPYGCA CLAPAARAAE AEAAVTWVAY SAFAAHPLY GLLQRPVRLA LGRLSRRALP GPVRACTPQA WHPRALLQCL QRPPEGPAVG PSEAPEQTPE	Homo sapiens
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629	190774	Histamine H4 Receptor	NP_067637.2	<p>acatttatt agtttggtta ttttttttg agatgggggt ctgtcttgt tggccacgca ggagtgagc  ggcagctct cagctcactg cagcccgag tgcctaggct ccagaatct tctacgtca gctccacagag tagctgggac  cgaggcact tgcaccacg cccactaaa aatttttaa atgttgct tcttgaagt gtctctgccc tgtctttgic acaaatitc  attttica tagttaatt cactctccg gtaagatttt atgggtttt ctittatac ttgcagtic ttacccgtt tgggatttt calgtttct  agaaacttia aaccttiac ttcaacatt aaaaatacaag tcttttaagt acatgagtg tgaataagt acataatgt talatacact  talgccttac attaaagcc aataagaga aataatgtt aacatcaat aataattta aaaaattgag aataaactc tcaataatgc  aaaaaataa aaaaaaaa</p>	P	Homo sapiens
630	190823	Formyl Peptide Receptor 1 (FPR1)	NM_002029	<p>MPDTNSTNL SLSTRVTLAF FMSLVAFAIM LGNALVILAF VVDKNLRHRS  SYFFLNLAIS DFFVGVISIP LYPHILFEW DFGKEICVFW LTIDYLLCTA SVYNIVLSY  DRYLSVSNV SYRTQHTGVL KIVTLMVAVW VLAFLVNGPM ILVSESWKDE  GSECEPGFES EWWYLAITSF LEFVPVILV AYFNMMIYWS LWKRDHLSRC  QSHPGLTAVS SNICGHSFRG RLSSRRSLA STEVPASFHS ERQRRKSSLM  FSSRTKMNSN TIASKMGFS QSDSVALHQR EHVELLRARR LAKSLAILLG  VFVVCWAPYS LFTIVLSFYS SATGPKSVVY RIAFWLQWFN SFVNPLLYPL  CHKRQKQAFK KIFCKKQPL PSQHSRSVSS</p>	A	Homo sapiens
631	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	<p>ccagactta gaactaccca gagcaagacc acagtggig aacagtcacg gagcagacaa gataggagaca aattccctc  tcccacgaa calctctgga gggacacctg cigtatcgc tggctatc tctcttgala tcatcatt tctgtatt ggcagcact  tctctcgg ggtcttgagg aacgggctg tgaictgggt ggcctggatic cggatgacac acacagtcac caccatcagt  tacctgaacc tggccgtggc tgaictgt ttacattc cttggcatt ctacatggc aggaaggcca tggggaggaca tggcccttc  ggcctgttcc tggcaaat cgtcttacc alagtgga tcaactgt cggagatgic ttcttgatg cctcatigc tctggacggc  tgttttgcg tcttgatcc agcttgacc cagaaccacc gcaccgtgag cctgggccaag aagggatgaca tggggccctg  ggataggct ctgtctca catggcagt tatctgt gtgactacag taactggtaa aacgggggaca gtagccigca ctttaact  ttcggccgg accaagacc ctaaaagagag galaatatg gcccgttgcca tgttgacggt gagagggtalc atccggfca  tcallggct caggcacc atgtccatg tttgtgtcag ttatgggctt atggcacc aatocacca agatoccaa gcaaggctg attaatgaca  gtctgacctt acgggtctc tctttgtc gacgagcctt tttctctg tggccocat atcagggtgt gggcccttala ggcacagica  gaatccgiga gttatgcaa ggcaltgaca aagaatgg tatgacagtg gatgtagaca gggccctggc cttctcaac  agctgctca acccatgct ctatgctc algggcagg acttcgggag gaggtgtag cagcccttc ccggcagct  ggagaggggc ctgacggag acicaacca aacagtgac acagctacca attactt acccttgca gaggtggagt  tacaggcaaa gtagggaggg agctggggga cactttcag ctccagctc cagctctgc tcaacttgag ttaggctgag  cacaggcatt tctgtctat ttaggatta cccactcacc agaaaaaaa aaaaaagcct ttgtgtccc tgaattgggg agaataaaca  gataggtt t</p>	P	Homo sapiens
632	190824	Formyl Peptide Receptor-like 2	NM_002030	<p>METNSSLPNT ISGTPAVSA GYLFLDIITY LVFAVTFVLG VLGNGLVWV  AGFRMTHVT TISYLNLA VA DFCSTSLPF FMVRKAMGGH WPFGWFLCKF  VFTIVDINLF GSVFLIALIA LDRCVCVLHP VWTQNHRTVS LAKKVIIGPW  VMALLTLPV IIRVTVPGK TGTVACTFNF SPWINDPKER INVA VAMLTV  RGHIFIGF SAPMSIVAS YGLIATKHK QGLIKSSRP RLVSFVA AF FLCWSPYQVV  ALIA TVRIR E LLOQMYKEIG IAVDVTSALA FFNSCLNPM L YVFMGQDFRE  RLIHALPASL ERALTEDSTQ TSDTATNSTL PSAEVELQAK</p>	A	Homo sapiens



(FPR2)

633 190824 Formyl Peptide NP\_002021.2 P Homo sapiens  
 Receptor-like 2  
 (FPR2)

cacagicaac accatcgt acctgaacct ggccttagct gacttctt tcaagtcac ctiaccattc cgaatggctt cagtcgcat  
 gagagaaaa tggcctlttg cgtcattctt algtaaagta gtatagata caaocgttt gtcatgtctt accctgatcac  
 catcattgt ctagacogct gtaattgt ccttgatcca ggcctggccc agaaccatcg caccatgagt ctggccaaga  
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 calactgat ttcaactt gcatctggg gtagacatcg ttagagagag tgaacgtgt tcatcaccat ggccaaggct ttctgatcc  
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 tggcagctcg gctcaagaag algtgttaa atggcaata caaatcatt ctgttccga ttaaccaac aagctccttg gcttttta  
 acagctgctt caaccaat ctactgct ttatgggtc taacttcaa gaaagactga ttgccttt gcccactagt ttggagaggg  
 ccttgactga ggtcctcag tcaagccaga ccagcaaac acacaccact tctgttcc ctcctgagga gacggagta  
 caagcaatgt ga

634 190948 EMR2 Hormone NM\_013447 A Homo sapiens  
 Receptor

cggagagagg acagccctgt cccactcact ctttccctg cgtctctcg cggcagctca gcttggaaacca tgggagggccg  
 cgtcttct cgttctcg cactcgtgt cgtgcgtact ctagcgggag ctgaaaccca ggaactccagg ggcctgtgcc  
 ggtgtgtccc tcaaggactc tctgtgtca atgcacccg cgtctgtcgc aatccagggt tcaagctctt ttctgagatc  
 atccaccc ccatggagac ttgtgagac atcaacgagt gtgcaacact gtgcaaggt tcatgctggaa aattctggga  
 ctgtctggaac acagaggggga gctacgactg cgtgtgtcag ctaggtatag agctcttct tggggcctaaa acatcaaga  
 atgtgagctga gaaacatgt caagatgtgt acgaatgca gcaagaaacca agctctgtia aaagcttactg cactcgtc  
 aacacccctg gcaagctacac gtgccaatgt cgtccctgtct tcaagctcaa accgtgagac ccgaaagctct gcaagatgt  
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 gcccgcggg ctggcaacgg attccgggggt ccccaatgg ccaacaat accgtctgt agatgtgga cgaatgtcag  
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 ggtctgtgaa ctacgtat cctgcaggca caaatgtc cctgtgaggt cagaagcag tagacagggag tgcacctg  
 agacagatc aggcagtgat gcaagctgac tggatcagg cacaagaaic tggtaacca ggtccctctg tgggtggct  
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 acccaaac tcaagctccc agttacctt accctccc accgttcat gtaaccagaga cagaaggtgc tctgtctt  
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 tctgcccgtg caaacctg agcagcttg ccgtctcat ggtccatcag gtagcagg agggagatcc cgtgtgtact  
 gtcatcact acatggggct gtagctctct cgtgtgtgccc tctctgtgccc ggtccctact tttctctgt gtaagccat ccagaaacc

635	190948	EMR2 Hormone Receptor	NP_038475.1	P	agcacctcac tgcaltcga gctctgcic tgcctctcc tggccacact cctctctcc tggcaatig atcaaacagg acacaaggig cigtctcca tcatgccgg taccitgac tatctacc tggccacct caccitggag cigtctggagg ccctgiacct ctctctact gcacggaaac tgaogggigt caactactca agcalcaaca gattcalgaa gaagctcag ttccctggg gclacggagt cccagctgig acagiggcca ttctgcagc ctccaggct cactttatg gaacacctc ccgctgicgg ctccaaccag aaaaggggati tatalggggc ttcttggag cigtctgcgc calctictc tggcaatig ttctttct ggtagactic tggatttga aaaacagact ctctccctc aalagtgaag tgcacacct cgggaacaca aggaigtgig calttaagc gacagctcag cigtctacc tgggctgac gtagctgic ggcatctgc aggtggggcc ggctggccgg gicalggcti acctctcac calcatcaac agccigcagg gtagctcat ctctctgag tactgctcc tccagccagca ggctccgggg caatalggga aalgttcaa agggatcagg aaatigaana ctgaatcga gatgcacaca ctctccagca gigttaaggc tgaacctcc aaaccacaga cggtaacla gaaaalict ctgaataaga tcttccctc tggccggigg aaaaatcga caatcttga gccatcaga ggggaagaa aagactttgt tctgttgt tcaagaat caccaltga gcaatagaa ggatgtatg gaaggcggc ttggcatca attctgcag aaaccggaaa tcttccalc cctgcaagt gctcalcaaa cttcagcat atggagggcc agctgiggcc calactigg tcaatcga gcaaatat tagaagcta tagaagctta agacctctt cacagctct cctcttaca aagactctc caaatctaa aalgaagcag gaaaacagc ctgaagaggac ttcalaccg acaacatcig aaaggactag aatgttaca ccagatcig gattcttaa tttttgt tttttgt tttttgt tttttgt ttgattatt agtcatgta aatatatga ttactcac atagatcaag agagacacagg ctctgctt catggagct ttgggggaaa atgaagggc tctgagct agagtgaat cagaagcca aattcttga aatcaggti ctactgtag gcaatigaag tataaatat ttataaca cigtctct tcatctac	Homo sapiens
636	190955	Leukotriene B4 Receptor BLT1	NM_000752	A	gcaatctt cacatccgt gggctcaga agccctctt gaactctgac ttcagtctt gctggggtt ctgcccatt ttctatc ctctgacagc tgcgaggica tctctgctt ggtcttct caagcagaac aagtgggggc tctggaaagg ttaaggagc tcaaggcca ccattact ttgacttt cctgagaagt gagaatgaa aggaagcag gaaggcccat ggtagatg aagggaaggac tttagttt cttttttt ttittgaat gtagctcgc tctgctc aggtgagt gtagtggc gatctagct cactgagcc tccactctt gggttcat gattctctg cctcagcic ccaagtagct gtagctagc gcaatgcca	Homo sapiens

ctacaccag ctacttttg tattttagt agagagcgggg ttacacalg tggccaggc tggctcaaa cgtctaaat caagtgatct  
 gctccctca gctcccaaa gtgctgggat taccggtag agccacaca acttgcagg aattttagt tttagcttt tgcaggagac  
 ttcaaggaaa ggaacatc cctgtccag gaacgggga agggagacat ttctgcatg cgggttccc ctctggcag  
 ggtgggcag aggcacat gttccctc cctactct gctctcag ctacggcag cagctcggcc tcaactttgt gtgtctaaag  
 tggaaactgaa tagtagctgt ggaagagga gttccaatct ccttgcacat alcaataalc cagactcagc  
 agggtaacca calggcaag cacagggtag gtgttgggg aaggggggaag taatttggcat tctgtgtat accaaggaga  
 ccatttggat ttggctct accaaggaga atgggaatt gtgtgacct aatggacca gtcccttaa gtaaggggag  
 gaaagggggt gctggagat gggccttc ccaccacta gataagct tgaactgaag ccaaggagacag agtgcctccc  
 ccttggcat ttactgat gctcttta aatcatalg ttatcaacc caaacacaga ccaaggacct agtcacagct ccaacctaca  
 ctctctat atctaaac aagggcaac aaacacaaa agatalcag atgttagct ccaatctgag cccatttccc ttcttggct  
 accatactc ctctctat atgatacat tcaacttt gttcaatt cagctcaga cctgcatct gaggccacac ccagctct  
 cactccac accctctt cctctcac tctcttcc tggctctc tcatctggcc ccacctaa ggaagctccc tgccttgg  
 gttccctgg aaaaagact alcccccct ctggtagag ggtggggtag ggggttcag cccacctca ggaagagcgc  
 tctccctgt cctctct cttgtact cctcttggct gatttagcaa acagccacta gacctggggc caggcccttg gcaaggagac  
 agatccagg alaggctaca ccacctggc ctgaacctgg gattggcalt agttccaac cagttcctgc caaagctgt  
 aagctctcc gacggccalg aacatacat ctctgcagc acccccctca ctgggttag agttcatc tctgtctgct atcatctg  
 tgtcagggt gctggctgg ggaagctt gttgtgttgg agttactga aagggtagca gaaagctct  
 gtcactggcc tgaagctgt gaaactggcc ctggccgacc tggccgtatt gctcactgt ccttttcc ttacttct ggccaggc  
 accgtgagtt ttggactggc tgggtggc cttgtcact atgtctggc agtcagcag taccagcag tctgtctat  
 cagggccalg agtcagacc gctcactggc ggtggccgc cctttgtt ccaagagact accgaccaag gctgagggcc  
 ggcgggtgt ggcaggcalt tgggtgtt gtttctgt ggcacaccc gctctgggt accgcacag agtggccctgg  
 aaacgaaca tgaagctgt cttccggc taccagcg aagggcaccg ggccttccat ctactctg aggcgtgtcac  
 ggcctctg ctggctcc tgggtgtgt ggcagctac tggacalag ggggtcggct acaggcccg cgtctccgc  
 gcaagcccg caccggcc cttgtgtgt tcatctct gaccttggc gctcttggc tgcctacca cgtgtgaac  
 ctgtgtgag cggccggc gctggccggc caggccggc ggttagggct cgttggggag cgtgtgagoc tggccggcaa  
 cgtgtcalt gcactgct tctgtgag cagcgtgaac cctgtgtgt acgtgtgt cgtgtgtgt cgtgtgtgt  
 cggcggcgt gggcttgc gccaagct tggagggcac ggttccgag gcttccaga cgcggccgg gggcagcctg  
 ggccagacc ctaggagcgg cccggcgt ctggagcccg gcccttcca gaggctact gcttccagcc ctctcaagt  
 aaacgaactg aactggct ggtggagga ggcgcactt cctctggca gaatgtcag tctgagccag ttcatctt  
 ggaaggag caggggctgt gagggtgt gggcgtgt gggcgtgt gggcgtgt gggcgtgt gggcgtgt  
 gaggagaga tggagcaag tggggcga gtagagcgt gctcagct ggtccaca ggcagctta accattaaa  
 ctgaagctgt aa

637	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	MNTTSSAAPP SLGVEFISLL AILLVALA VGLPGNSFVV WSLKRMQKR SVTALMVLNL ALADLAVLLT APFLLHFLAQ GTWSFGLAGC RLCHYVCGVS MYASVLLITA MSLDRSLA VA RPFVSQKLRT KAMARRVLG IWVLSFLLAT PVLAYRTVVP WKTNMSLCFP RYPSEGHRAF HLIFEA VTGF LLPFLAVVAS YSDIGRRLLQA RFRRSRRRTG RLVLILTF AFWLPYHVV NLAEAGRALA GQAAGLGLVG KRLSLARNVL IALAFSSV NPVLYACAGG GLRSAGVGF VAKLEGTGS EASSTRRGGS LGQTARSGPA ALEPGPSESL TASSPLKLINE LN atgagccct ttggccaaa tataataat atttctgtg tgaataacaa cttgtcaaat gatgtccgtg cttccctgta cagttaatg	P	Homo sapiens
638	191039	Trace Amine	AF380185		A	Homo

sapiens

Receptor 1 (TAI)

ggctcatalaa ttctgaccac actcgttggc aatctgatalg ttatgttct tatatcacac ttcaacaac ttacalaccc aacaaattgg  
cicalcatt ccaltggccac tggggactt cttcgggggt gctgggctat gctctiagat atgggtgagat ctgctgagca ctgttggat  
ttggagaag tctctiglaa aatcacaca agcaccgaca ttatgctgag ctgagctcc attuccatt tgccttcat cctcatgac  
cgtactatg ctgtgtgtga tccatgaga tataaagcca agatgaalat ctgttatt ttgtgtatga tctctatg ttgggtgtg  
cctgtctgt ttcatlgtt aatgtatctt ctggagctaa acttcaaaag cgtctgaagag alatalaca aacatgttca ctgcaagagga  
ggttgtctg tctctttag caaaalatct gggtgtactga cctttatgac ttttttat atacctggat ctattatgt atgtgtat  
tacagaatat atctatgc taaagaaacag gcaagattaa ttatgtatg caatcagaag ctccaaatg gattggaaat  
gaaaaatgga atttcaaaa gcaaaagaaag gaaagctgtg aagacatgtg ggtatgtat gggtgtttc ctatattgt  
gggtgctt ctattatgt acagtcalgg accttttct tcatcatatt attocacca ctgtgaatga ttgtgtatgt ttgtttggct  
acttgaact tacattat ocaatgttt atgcatlitt ctatcttgg ttgaagaaag cactgaagat gtagctgttt ggtaaaatt  
tccaaaaa ttatocagg ttgaatat ttgtgaatt gattcatag

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Trace Amine Receptor 1 (TAI)

MMPFCHNIIN ISCVKNWNVN DVRA SLYS LM VLJIL TTL VG NLIVIVSISH  
FKQLHTPTNW LIHSMATVDF LLGCLVMPYS MVRSAEHCWY FGEVFCKIHT  
STDIMLSSAS IFHLSFISID RYAYAVCDPLR YKAKMNLVI CVMFISWSV PA VFAFGMIF  
LELNFKGAEE IYKYKHVHCRG GCSVFFSKIS GVLTFMSTFY IPGSIMLCVY  
YRIYLIKEQ ARLISDANQK LQIGLEMKNG ISQSKERKAV KTLGIVMGVF  
LICWCPFFIC TVMDPFLHYI IPPTLNDVLI WFGYLNSTFN PMVYAFFYPW  
FRKALKMMLF GKIFQKDSR CKLFLELSS

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G Protein-Coupled Receptor 88 (GPR88)

gggtttcaca ttagocacca cttctgtc ttgagacagg gttgtctct ctgagctca gctctgatt ttgagccaa gcatcttgc  
tgcctgtcc tgcctgcca cccgcttggc ctgagagcc gccatttacc ttctccag cctgatacca gctgagaagt  
ctcctgtcag ctgctatg ctgocagga ccatgtgttt ggtatgtct ttggagagagc gggtcacttgc tctgtgact  
gattccagct gattttctc tttgtatc ttgagacatg atgtctgtt ttgagagagga ttcttggca tctctccccc ttgagacacc  
gctaaagacc agcctaaacg caagggcagg caatgtcagg atggagccgc ctgocagag ccgacgclag cgaaggaggt  
gtgaagagt ggocagaatg accactct cctccatc cactctcc accaccgtt ttgggtctg gccatcgagg gcacgttggc  
gagagagag agtctgtggc gggtccggccg alccgggt cactctgta ttgggtctg gccatcgagg gcacgttggc  
caacggcalg gtcattatc tctgtc tctccagag ctgagagca ccagcaacgc cttatgtt aacggctgtg  
ccgcccagct cagctgtc gcccttggga tgcggcaggga gggtctctgc gggtctctgc ccacggctc tgcggagccc  
cccagagact gggtcggc tggggggcagc taccgctgc taccgggttgg gctgttggc ctggagctca cgggttctct  
cctctccac tgcctgttgg cctgaacgg ctactgtc atacccggc cggccggccac ctacagggcg ctgatacaga  
gggtccacac gggtgggcalg ctgggtgtct cctgggtgt cttgtgttggc ctgtgtctg tgcctccggc ctggggcacc  
cgggtccggc cgggtccac gccaatccac taccgggcgc tgcctgttggc cgggtgtctg ctgggtcaga cagctgtct  
gctgtcactg taccgttggca tctgttggc cgtgtgtgtc agtctcagc gggtcagcgtt gctcaactc cactgtctg  
aocatttgc cgtgttggc cgggtccggc cgtcttcc gggtccagc cagcgttggc cgggtccggc cgggtccggc  
cgggtccagc cccagctctt gccaacggc ctgacccgc gggtccggc cgggtccggc cgggtccggc cgggtccggc  
gctgtctg gcttcttgc ttggccagca cccactgttgg ttgggtgtc ttgggtgtc cttctgtc cgggttccct  
gggtgtgtc cgtgtccagc ttgtctctgt gctgtgtc gctgtgtc aaacctgtc tctacagtg gtaggtgtc  
gagttccgc gctgtgtc ctgagttct cgggtgtc gggtgtc gggtgtc gggtgtc gggtgtc gggtgtc  
cgtgtgtc caggtgtc ttgggtcagc cgggtgtc caggtgtc caggtgtc caggtgtc caggtgtc caggtgtc  
tccctgtc caggtgtc ttgggtcagc cgggtgtc caggtgtc caggtgtc caggtgtc caggtgtc caggtgtc  
cgaagcccg tagatgggg gaaaaagggg ccttgcac caggtgtc caggtgtc caggtgtc caggtgtc caggtgtc

641	191132	G Protein- Coupled Receptor 88 (GPR88)	NP_071332.1	<p>gccegaagc atttggagc gccacctgat ttttaccctt tttttcttgg ttttagagga atccctaaag caaacaccca gagacttga  gaacttgcac actggcggtt taaaataacc ggtaatttta ttccacaca gtttgtttt gaanaagagc tttaataag tataacctt  tccacttca tctcttata tatgaagcgc ctggagtgig calgaaccaa aggaataaac attgaagaag gaanaacala  tgtagaaagt atttagaaa gtaaccgtgc tttagtgalg cttctctac catttagtt ttgtatatta cccgtggggca gtagagccot  aggttgccc accagatga gttgocalla agaccctaac ccccttacc ttaaagggg tttaalaaa gtttttca aalgaggtag  aatcttagcc agttagaanaa aaaaatttt tatgtccct tttttcgca ctttaagac tgaanaatgg cgttagagtg tatagtga  atttccagt ttgataatgg algtgtcagag ccagcacagg aatttgaaa acaanaaagg tgattatcta ttttaggtac cgtttacat  tttctatgc atgcacactt gttgtaccc tcaatttga accaatttat ttgccttag aalgtagtg cagctttgaa cattctgtac  tgtaatgggt gctaaagaaga ataaagcttt cgttttctc ttttaacatt aaataatc aalgacacalg atataatfaa acactaata  taccatgact gcalagctaa tatagctgc tatgcaigc tcttagatgc tagaacttat tgggcatgtg gtalactgaa gogatacccg  ttagacaagg alattttact tctccagac accagaagaa alggccttca attattgaa aagaagacaca gagacacctc tggclaccla  gagttcttc tgccttgacc aatttatgag aaagctccca gttgggact tatccacaa gtggaatcac agtcaagagc galcaalaat  alggttggct cagcaagcc agctgtgctc ttttaggtt taacaagcc acacgttaga aagcaacact gtttttatgt agttcalata  tataccacg acatttaaca tcaatattgt alattgtgaa ggaggtalaa taactatagt calatatagt gaacagtta aalggtgaag  tgttcaaaa calattattt gaggtttgtc atattcatct ttgttttact aaatttact agaaatattt gaaalgcaaa attgtgtgaa  alcaccttat caaattaaaa tgggaagaaa gtaattttaa taatttttaa taactatag tgcactatct gactacttac cacatcaaat  ctggggccaa acagctcagc ttaactgat aattcaggaa caaaacagc tttgtttgt gcaogccctgg gcaatttcag  ccaggacatt aggaccactt gttgtatc tgaaatatta tggaaatggg gacalgttaa ggaanaacaa tatgttalc accaacaalc  agctgtcatt ttataatct atcccttttg tgcagcacc atttctct tactaacagt ttacttgtt cacattttc ttgattcaaa  taftaaagt cagaaaaaaa aaaaaaaa aaaaaaaa aaaaaa</p> <p>MTNSSSTSTS STTGGSSLLL CEEESWAGR RRPVSLLYSG LAIGGTLANG  MVIYLVSFR KLQTSNAFI VNGCAADLSV CALWMPQEAVALGLPTGSAE  PPADWDGAGG SYRLRGGLL GLGLTVSLLS HCLVALNRYL LITRAPATYQ  ALYQRRHTAG MLALSWALAL GLVLLPPWA PRPGAAPRI HYPALLAAAA  LLAQTALLLH CYLGIVRRVR VSVKRVSVLN FLLHQLPGC AAAAAAFPGA  QHAPGPGGAA HPAQAQPLPP ALHPRRAQRR LSGLSVLLC CVFLLATQPL  VWVSLASGFS LPVPWGVHAA SWLLCCALSA LNPLLYTWRN EEFRRSVRSV  LPGVGDAAAA AVAATAVPAV SQAQLGTRAA GQHW</p>	P	Homo sapiens
642	191168	P2Y12 Platelet ADP Receptor	NM_022788	<p>ggcigcaata actactact actggatata ttcaaacctt ccagaataca cagitatcag gtaaccaaca agaaalgcaa  ggcgtcgaca accctaccctc tgcgcctggg aaacaccagtc tggcaccagc agactacaaa atcaccacagg tcccttccc  acgtctctac acgtctctgt ttgttgg actatcaca aatggcctgg cgaatggagat ttcttcaa atccggagta aalcaaacit  tatattttt ctlaagaaca cagtcatttc tgaatcttc algtatctga cttttcatt caaaattct agtgaigcca aacitggggaac  aggaccacgt agaaactttg tgggtcaagt tacctcctgc atattttat tcaaatga tatcaglat tcaittctgg gactigalaac  tatctatgc tactagaaga ccaccaggcc atttaaaaa tcaacoccaa azaatctct ggagggttaag attctctc tggatcagc  ggcattcag tttactct ctgttctaa calgancig accaaccaggc agccggagaga caagaalgig aagaalgct ctltcttaa  alcaaggttc ggcttagtct ggcalgaat agtaaatatc alcitgtcaag tcaitttttg gattaatttc ttaattgtta ttgtatgta  tacactcatt acaaaagaac tgaaccgtgc atactgaaga acgaagggtg taggttaagt ccccaaggaaa aagggtgaacg  tcaaaagttt cattatcatt gcigtatct ttattgttt ttttctttc cattttccc gaattctta caccctgagc caaacccggg  algtcttga ctgcacigt gaaataatic tttctatgt gaaagagagc actctgtgtt taacttctt aalgicagc ctgtatccgt  tcatctatt ttcttttg aagttctca gaaattctt gataagialg ctgaagtgcc ccaattctgc aacatctcgc tcccaggaca</p>	A	Homo sapiens

643	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	<p>ataggaaaa agaacaggat ggtgggacc caaatgaaga gactccaatg taacacaatt aactaaggaa alatticaat ctcttgggt tcaagaactg ttaagcaaaa ggcgaagta aaaaattataa ctagcaaga agcaactaag ttaataaaa tgaactaaa gaacagaag attacaaag caatttcat tacccttc agtaagaata gctatctaa aataagaata actaatctaa acttagcig tattagcagc aaaaacaacg ac</p> <p>MQAVDNL TSA PGNTSLCTRD YKIQVLFLPL L YTVLFFVGL ITNGLAMRIF P Homo sapiens</p> <p>FQIRSKSNFI IFLKNTVISD LLMILTFPEK ILSDAKLGTG PLRTFVCQVT SVIFYFIMYI</p> <p>SISFLGLITI DRYQKTRPF KTSNPKNLLG AKILSVIWA FMELLSLPM ILTNRQPRDK</p> <p>NVKKCSFLKS EFGLVWHEIV NYICQVIFWI NFLIVIVCYT LITKELYRSY</p> <p>VRTRGVGKVP RKKVNVK VFI IIAVFFICFV PFHFARIPYT LSQTRDVFDC</p> <p>TAENTLFYVK ESTLWLSN ACLDPFIYFF LCKSFRNSLI SMLKCPNSAT</p> <p>SLSQDNRKKE QDGGDPNEET PM</p>
644	191193	Trace Amine Receptor 3 (TA3)	AF380189	<p>aiggigaata attictcca agcagggt gggagcgtgt gtiacaagaa cgtgaacgaa tcttgcata aaactccita A Homo sapiens</p> <p>cicgccaggt cctgacta tctciacgc cgtcttgggt ttggggcig tgcctggcagc gtttggaaac ttacttgctat</p> <p>ccttcacttc aaacaactgc acacacac aaacttcig attgcgcgc tggccctgcgc tgaacttcig ggggagctca cgtgagcgc</p> <p>citcagcaca gggaggcig tggagagcig tiggacttt ggggacagtt acgtataat ccalacatgt ttgacacat cctctgttt</p> <p>tgtctctta ttacattat gctgactc tgttgaaga tacaatgcig ttaactatcc tctgaactat ccaaccaagt ttacttgic</p> <p>agtticaggg atatgcalig tcttctcig gttcttctt gicacalaca gcttttcgt cttttacagc ggggccaacg aagaagggaat</p> <p>tgaaggaata gtagtgcic taacttcgt agggagcgc caggctccac tgaatcaaaa cggggccta cttgtttc tctatctt</p> <p>talaccaat gtcgccaggg ttttalaia cagtaagaia tttttgggg ccaagcatca ggctagggaag atagaagata</p> <p>cagccagoca agcicagcc tctcagaga gtiacaagaa aagaagtagca aaaaagagaga gaaaggcgc caaaaacttg</p> <p>ggaattgcta tggcagcatt tctgtctct tggcaccat accctgtga tgcagtgat gactgtata tgaattttat aactctcct</p> <p>tatgttatg agattttat tgggtgtgt tattataat cagctatga ccocttgat tttgtctt ttaccaatg gtttgggaag</p> <p>gcaataaaac ttatgaag cggcaaggc ttaaggagc attgcgaac aactaatia ttcttgaag aagtagagac agattaa</p> <p>MVNNFSQAEA VELCYKNVNE SCIKTPSPG PRSILYAVLG FGAVLAAFGN P Homo sapiens</p> <p>LLVMIALHF KQLHTPTNFI IASLACADFL VGVTVMPFST VRSVESCWYF</p> <p>GDSYCKFHTC FDTSCFASL FHLCCISVDR YIAVTDPLTY PTKFTVSVSG ICIVLSWFFS</p> <p>VTYSFSIFYT GANEEGIEEL VVALTCVGC QAPLNQNWVL LCFLFFIPN</p> <p>VAMVFYYSKI FLVAKHQARK IESTASQAQS SSESYKERVVA KRERKAAKTL</p> <p>GIAMAAFLVS WLPYLVDVAVI DAYMNFITPP YVYELVWCV YYNSAMNPLI</p> <p>YAFFYQWFGK AIKLIVSGKV LRIDSSTTNL FSEEVETD</p>
645	191193	Trace Amine Receptor 3 (TA3)	AAK71240.1	<p>algaalgagc cactagata tttagcaaat gctctgatt tcccgatha tgcagctgt tttggaatt gcactgatga aaacalocca</p> <p>cicaagatgc actactccc tgratttat ggcattatct tctcgtggg atttcaggc aatgcagtag tgalatccac ttactttic</p> <p>aaaatgagac ctgggaag cagcaacatc attatctga accctggcgc cagagatgc cgtatctga ccagctccc</p> <p>cttctgatt cactatcgt ccagtgga ccaactggatc ttggagatt tcaitgtaa gttatccgc ttacgtccc atttcaact</p> <p>gtatagcagc altctctcc taccgttt cagcalctc cgtactcgt tgalcatca ccaatgagc tgcittcca ttcaaaaac</p> <p>togatgtga gttttagcct gtcgtgtgt gtagatcatt tcactgtag cgtctacc galgacttc ttgalcatc caaccaacag</p> <p>gaacaacaga tcaagcctgc tgaactcac cagttcggat gaaticaalat clattaagtg gtiacaactc atttgactg caactactt</p> <p>cgtctccc ttgtgtalag tgacacttg clatacacg attalocaca cttgacoca tggactgcaa actgacagct gcttaagca</p> <p>gaaagcacga aggtaacca ttctgclact cttgcatit tagctatgt tttaacctt ccalactgt aggtctalc ggaicgaic</p> <p>tgcctgctt tcaatcagtt gttccattga gaalcatgalt calgaagctt acalgctt tagaccata gctgctctga acaccttgg</p>
646	191196	G Protein- Coupled Receptor GPR80	AF411109	<p>algaalgagc cactagata tttagcaaat gctctgatt tcccgatha tgcagctgt tttggaatt gcactgatga aaacalocca A Homo sapiens</p> <p>cicaagatgc actactccc tgratttat ggcattatct tctcgtggg atttcaggc aatgcagtag tgalatccac ttactttic</p> <p>aaaatgagac ctgggaag cagcaacatc attatctga accctggcgc cagagatgc cgtatctga ccagctccc</p> <p>cttctgatt cactatcgt ccagtgga ccaactggatc ttggagatt tcaitgtaa gttatccgc ttacgtccc atttcaact</p> <p>gtatagcagc altctctcc taccgttt cagcalctc cgtactcgt tgalcatca ccaatgagc tgcittcca ttcaaaaac</p> <p>togatgtga gttttagcct gtcgtgtgt gtagatcatt tcactgtag cgtctacc galgacttc ttgalcatc caaccaacag</p> <p>gaacaacaga tcaagcctgc tgaactcac cagttcggat gaaticaalat clattaagtg gtiacaactc atttgactg caactactt</p> <p>cgtctccc ttgtgtalag tgacacttg clatacacg attalocaca cttgacoca tggactgcaa actgacagct gcttaagca</p> <p>gaaagcacga aggtaacca ttctgclact cttgcatit tagctatgt tttaacctt ccalactgt aggtctalc ggaicgaic</p> <p>tgcctgctt tcaatcagtt gttccattga gaalcatgalt calgaagctt acalgctt tagaccata gctgctctga acaccttgg</p>

647	191196	G Protein-Coupled Receptor GPR80	CAC51133.1	taacctgtta ctataltggtg tggctcagcga caactttcag caggctgtct gctcaacagt gagatgcaaa gtaagcggga accttgaga agcaagaata allgttact caaacaacc ttga MNEPLDYLAN ASDFPDYAAA FGNCTDENIP LKMHYLPVY GIIFLVGFPG NAVVISITYF KMRPWKSSSTI IMLNLACTDL LYLTSPLFI HYYASGENWI FGDFMCKFIR FSFHNLYSS ILFLTCSIF RYCVIHPMS CFSHKTRCA VVACAVVWII SLVAVPMTF LITSTNRTNR SACLDTSSD ELNTIKWYNL ILTATTFCLP LVIVTLCYTT IHTLTHGLQ TDSCLKQKAR RLTIILLAF YVCFLPHIL RVRIESRL SISCSENQI HEAYVSGPL AALNTFGNLL LYVVVSDNFQ QAVCSTVRCK VSGNLEQAKK ISYSNNP tccctggccc ttaataaag acttaalc ttaagcctc tgaattcct tctgtiaaaa cagggcggtt aattacaca taacagcgtg gcalgaataa tcaatgaaca tgcagcaggt gctcaagtct tgttttgt tcaagggga cagtgaggg ttctlgagc atggatccaa ccaccggc cgggggaaca gaaggaaca cagtgaaagg aatgaacca gccctcttc tgccttgagg caaggagacc cigatccgg tctctgat cctttcatt gccctggctg ggcctgtagg aaaggggtt gtcctlgc tctggcct cggcaltgcg aggaaagcct tctctgta cgtctcagc cggccgggg ccgacttct cttctctgc tccagatta taatgtcct ggtgtacc agtactct tcttccat cctcaaat tccctagct tctcaccac tggatgacc tggcctacc tgcagggct gaggcaltgc agcaccgtca gcaccagcg cggcgtcc gtcctggc ccatlggt tgcctggc cggcccgac accgtcagc ggctgtgt gtcctct gggccctgc cctactgc agcaltgc aggggaagt cgtggctc ttattagtg atgtgtac tgggtgtg cagacattg altcalac tgcagcggtg cgtatttt taltcgt tctctgggg tccagctgg cctgtcgt caggatctc tgggtcca ggggtctgc actgaccagg cgtactga ccatcgt cagagctg ggtctctc tctggcgt gccctggc altcaggt tctaatt alggtalc tgggtggc tttgtatt tttgtatt calccagtt cagttgct gtcactt aacagcag ccaacccat cattactc ttcggggc ctttaggaa gcagtgcg cgcagcagc cgatctcaa gctggctc cagagggc tgcaggacat tgcctgggt gatacaga taltgtggc ttgtgaggc acccggga tgcgagaa cagctgggt tagagagga cagcctac tccatcaga taltgtggc ttgtgaggc aacctggc cgtctgt gattgtga acttctcag tctgtatt aaacagta agaggtct tggagggt aagtgagca MDPTTPAWGT ESTTVNGNDQ ALLLCGKET LIPVFLFI ALVGLVGNFG VLWLLGFRMR RNAFSVYVLS LAGADFLFC FQIINCLVYL SNFFCSISIN FPSFTTVMT CAYLAGLSML STVSTERCLS VLWPIWYRCR RPRHLSAVVC VLLWALSLL SILEGKFCGF LFSDDSGWC QTFDFITAAW LFLFMVLCG SSLALLVRIL CGSRGLPLTR LYLTLTLTVL VFLLCGLPFG IQWFLILWIW KDSDVLFCHI HPVSVVLSL NSSANPIIYF FVGSFRKQWR LQQPILKLAL QRALQDIAEV DHSEGCFRQG TPEMSRSLV tcatalacti gacattcti ttcagggcaa agtttagat acactgtgg catttccct gcalatgti gcaaatgtt ggcctgaag atcttgtt tctggcagg tgcagacti gccactagag cggggttgg tcatgtgac atggcgctc atgggtcca gtagagcagg actcaggga algctca cactatgga agaatacgt tagatcat tgaanaagg agacttgg ttaactct gcttaaat aatacalag catttggga tgaatgtga alacaggat ccalgttag atattaat gacaatac tccacagcgt gtaalat ggcaaatgt gtagcalaga tagggalga tggatcca gcalgaaat aatgtggat gccaaalgt algaattgg cttattgt attctat tggcttga aagcaaat gaagcaaat gaagccaggga tggcaalgt gccagcag gtggcaatg caagtatga tccctca cactocagg tgaactc tggcagagg acattcact ctacagtagg tctgcaag attagcaga gtgtcaat gacaactgg atggcggtc aagtgagat aataaggat ctacagtagg ggcactcag aattctgt aatttggat caagctga ggtagcaa atttcag actctgcaa aatgcaggag atgcaagg taaagctac tcaacatt gtcctggc tttatagt gtaggtctt ggttctcaa tgaanaagct cgtgtggca	P	Homo sapiens
648	191218	MrgX2 G Protein-Coupled Receptor	AY042214	taacctgtta ctataltggtg tggctcagcga caactttcag caggctgtct gctcaacagt gagatgcaaa gtaagcggga accttgaga agcaagaata allgttact caaacaacc ttga MNEPLDYLAN ASDFPDYAAA FGNCTDENIP LKMHYLPVY GIIFLVGFPG NAVVISITYF KMRPWKSSSTI IMLNLACTDL LYLTSPLFI HYYASGENWI FGDFMCKFIR FSFHNLYSS ILFLTCSIF RYCVIHPMS CFSHKTRCA VVACAVVWII SLVAVPMTF LITSTNRTNR SACLDTSSD ELNTIKWYNL ILTATTFCLP LVIVTLCYTT IHTLTHGLQ TDSCLKQKAR RLTIILLAF YVCFLPHIL RVIESRL SISCSENQI HEAYVSGPL AALNTFGNLL LYVVVSDNFQ QAVCSTVRCK VSGNLEQAKK ISYSNNP tccctggccc ttaataaag acttaalc ttaagcctc tgaattcct tctgtiaaaa cagggcggtt aattacaca taacagcgtg gcalgaataa tcaatgaaca tgcagcaggt gctcaagtct tgttttgt tcaagggga cagtgaggg ttctlgagc atggatccaa ccaccggc cgggggaaca gaaggaaca cagtgaaagg aatgaacca gccctcttc tgccttgagg caaggagacc cigatccgg tctctgat cctttcatt gccctggctg ggcctgtagg aaaggggtt gtcctlgc tctggcct cggcaltgcg aggaaagcct tctctgta cgtctcagc cggccgggg ccgacttct cttctctgc tccagatta taatgtcct ggtgtacc agtactct tcttccat cctcaaat tccctagct tctcaccac tggatgacc tggcctacc tgcagggct gaggcaltgc agcaccgtca gcaccagcg cggcgtcc gtcctggc ccatlggt tgcctggc cggcccgac accgtcagc ggctgtgt gtcctct gggccctgc cctactgc agcaltgc aggggaagt cgtggctc ttattagtg atgtgtac tgggtgtg cagacattg altcalac tgcagcggtg cgtatttt taltcgt tctctgggg tccagctgg cctgtcgt caggatctc tgggtcca ggggtctgc actgaccagg cgtactga ccatcgt cagagctg ggtctctc tctggcgt gccctggc altcaggt tctaatt alggtalc tgggtggc tttgtatt tttgtatt calccagtt cagttgct gtcactt aacagcag ccaacccat cattactc ttcggggc ctttaggaa gcagtgcg cgcagcagc cgatctcaa gctggctc cagagggc tgcaggacat tgcctgggt gatacaga taltgtggc ttgtgaggc acccggga tgcgagaa cagctgggt tagagagga cagcctac tccatcaga taltgtggc ttgtgaggc aacctggc cgtctgt gattgtga acttctcag tctgtatt aaacagta agaggtct tggagggt aagtgagca MDPTTPAWGT ESTTVNGNDQ ALLLCGKET LIPVFLFI ALVGLVGNFG VLWLLGFRMR RNAFSVYVLS LAGADFLFC FQIINCLVYL SNFFCSISIN FPSFTTVMT CAYLAGLSML STVSTERCLS VLWPIWYRCR RPRHLSAVVC VLLWALSLL SILEGKFCGF LFSDDSGWC QTFDFITAAW LFLFMVLCG SSLALLVRIL CGSRGLPLTR LYLTLTLTVL VFLLCGLPFG IQWFLILWIW KDSDVLFCHI HPVSVVLSL NSSANPIIYF FVGSFRKQWR LQQPILKLAL QRALQDIAEV DHSEGCFRQG TPEMSRSLV tcatalacti gacattcti ttcagggcaa agtttagat acactgtgg catttccct gcalatgti gcaaatgtt ggcctgaag atcttgtt tctggcagg tgcagacti gccactagag cggggttgg tcatgtgac atggcgctc atgggtcca gtagagcagg actcaggga algctca cactatgga agaatacgt tagatcat tgaanaagg agacttgg ttaactct gcttaaat aatacalag catttggga tgaatgtga alacaggat ccalgttag atattaat gacaatac tccacagcgt gtaalat ggcaaatgt gtagcalaga tagggalga tggatcca gcalgaaat aatgtggat gccaaalgt algaattgg cttattgt attctat tggcttga aagcaaat gaagcaaat gaagccaggga tggcaalgt gccagcag gtggcaatg caagtatga tccctca cactocagg tgaactc tggcagagg acattcact ctacagtagg tctgcaag attagcaga gtgtcaat gacaactgg atggcggtc aagtgagat aataaggat ctacagtagg ggcactcag aattctgt aatttggat caagctga ggtagcaa atttcag actctgcaa aatgcaggag atgcaagg taaagctac tcaacatt gtcctggc tttatagt gtaggtctt ggttctcaa tgaanaagct cgtgtggca	A	Homo sapiens
649	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	taacctgtta ctataltggtg tggctcagcga caactttcag caggctgtct gctcaacagt gagatgcaaa gtaagcggga accttgaga agcaagaata allgttact caaacaacc ttga MNEPLDYLAN ASDFPDYAAA FGNCTDENIP LKMHYLPVY GIIFLVGFPG NAVVISITYF KMRPWKSSSTI IMLNLACTDL LYLTSPLFI HYYASGENWI FGDFMCKFIR FSFHNLYSS ILFLTCSIF RYCVIHPMS CFSHKTRCA VVACAVVWII SLVAVPMTF LITSTNRTNR SACLDTSSD ELNTIKWYNL ILTATTFCLP LVIVTLCYTT IHTLTHGLQ TDSCLKQKAR RLTIILLAF YVCFLPHIL RVIESRL SISCSENQI HEAYVSGPL AALNTFGNLL LYVVVSDNFQ QAVCSTVRCK VSGNLEQAKK ISYSNNP tccctggccc ttaataaag acttaalc ttaagcctc tgaattcct tctgtiaaaa cagggcggtt aattacaca taacagcgtg gcalgaataa tcaatgaaca tgcagcaggt gctcaagtct tgttttgt tcaagggga cagtgaggg ttctlgagc atggatccaa ccaccggc cgggggaaca gaaggaaca cagtgaaagg aatgaacca gccctcttc tgccttgagg caaggagacc cigatccgg tctctgat cctttcatt gccctggctg ggcctgtagg aaaggggtt gtcctlgc tctggcct cggcaltgcg aggaaagcct tctctgta cgtctcagc cggccgggg ccgacttct cttctctgc tccagatta taatgtcct ggtgtacc agtactct tcttccat cctcaaat tccctagct tctcaccac tggatgacc tggcctacc tgcagggct gaggcaltgc agcaccgtca gcaccagcg cggcgtcc gtcctggc ccatlggt tgcctggc cggcccgac accgtcagc ggctgtgt gtcctct gggccctgc cctactgc agcaltgc aggggaagt cgtggctc ttattagtg atgtgtac tgggtgtg cagacattg altcalac tgcagcggtg cgtatttt taltcgt tctctgggg tccagctgg cctgtcgt caggatctc tgggtcca ggggtctgc actgaccagg cgtactga ccatcgt cagagctg ggtctctc tctggcgt gccctggc altcaggt tctaatt alggtalc tgggtggc tttgtatt tttgtatt calccagtt cagttgct gtcactt aacagcag ccaacccat cattactc ttcggggc ctttaggaa gcagtgcg cgcagcagc cgatctcaa gctggctc cagagggc tgcaggacat tgcctgggt gatacaga taltgtggc ttgtgaggc acccggga tgcgagaa cagctgggt tagagagga cagcctac tccatcaga taltgtggc ttgtgaggc aacctggc cgtctgt gattgtga acttctcag tctgtatt aaacagta agaggtct tggagggt aagtgagca MDPTTPAWGT ESTTVNGNDQ ALLLCGKET LIPVFLFI ALVGLVGNFG VLWLLGFRMR RNAFSVYVLS LAGADFLFC FQIINCLVYL SNFFCSISIN FPSFTTVMT CAYLAGLSML STVSTERCLS VLWPIWYRCR RPRHLSAVVC VLLWALSLL SILEGKFCGF LFSDDSGWC QTFDFITAAW LFLFMVLCG SSLALLVRIL CGSRGLPLTR LYLTLTLTVL VFLLCGLPFG IQWFLILWIW KDSDVLFCHI HPVSVVLSL NSSANPIIYF FVGSFRKQWR LQQPILKLAL QRALQDIAEV DHSEGCFRQG TPEMSRSLV tcatalacti gacattcti ttcagggcaa agtttagat acactgtgg catttccct gcalatgti gcaaatgtt ggcctgaag atcttgtt tctggcagg tgcagacti gccactagag cggggttgg tcatgtgac atggcgctc atgggtcca gtagagcagg actcaggga algctca cactatgga agaatacgt tagatcat tgaanaagg agacttgg ttaactct gcttaaat aatacalag catttggga tgaatgtga alacaggat ccalgttag atattaat gacaatac tccacagcgt gtaalat ggcaaatgt gtagcalaga tagggalga tggatcca gcalgaaat aatgtggat gccaaalgt algaattgg cttattgt attctat tggcttga aagcaaat gaagcaaat gaagccaggga tggcaalgt gccagcag gtggcaatg caagtatga tccctca cactocagg tgaactc tggcagagg acattcact ctacagtagg tctgcaag attagcaga gtgtcaat gacaactgg atggcggtc aagtgagat aataaggat ctacagtagg ggcactcag aattctgt aatttggat caagctga ggtagcaa atttcag actctgcaa aatgcaggag atgcaagg taaagctac tcaacatt gtcctggc tttatagt gtaggtctt ggttctcaa tgaanaagct cgtgtggca	P	Homo sapiens
650	191222	G Protein-Coupled Receptor Ls191222	LG94359	taacctgtta ctataltggtg tggctcagcga caactttcag caggctgtct gctcaacagt gagatgcaaa gtaagcggga accttgaga agcaagaata allgttact caaacaacc ttga MNEPLDYLAN ASDFPDYAAA FGNCTDENIP LKMHYLPVY GIIFLVGFPG NAVVISITYF KMRPWKSSSTI IMLNLACTDL LYLTSPLFI HYYASGENWI FGDFMCKFIR FSFHNLYSS ILFLTCSIF RYCVIHPMS CFSHKTRCA VVACAVVWII SLVAVPMTF LITSTNRTNR SACLDTSSD ELNTIKWYNL ILTATTFCLP LVIVTLCYTT IHTLTHGLQ TDSCLKQKAR RLTIILLAF YVCFLPHIL RVIESRL SISCSENQI HEAYVSGPL AALNTFGNLL LYVVVSDNFQ QAVCSTVRCK VSGNLEQAKK ISYSNNP tccctggccc ttaataaag acttaalc ttaagcctc tgaattcct tctgtiaaaa cagggcggtt aattacaca taacagcgtg gcalgaataa tcaatgaaca tgcagcaggt gctcaagtct tgttttgt tcaagggga cagtgaggg ttctlgagc atggatccaa ccaccggc cgggggaaca gaaggaaca cagtgaaagg aatgaacca gccctcttc tgccttgagg caaggagacc cigatccgg tctctgat cctttcatt gccctggctg ggcctgtagg aaaggggtt gtcctlgc tctggcct cggcaltgcg aggaaagcct tctctgta cgtctcagc cggccgggg ccgacttct cttctctgc tccagatta taatgtcct ggtgtacc agtactct tcttccat cctcaaat tccctagct tctcaccac tggatgacc tggcctacc tgcagggct gaggcaltgc agcaccgtca gcaccagcg cggcgtcc gtcctggc ccatlggt tgcctggc cggcccgac accgtcagc ggctgtgt gtcctct gggccctgc cctactgc agcaltgc aggggaagt cgtggctc ttattagtg atgtgtac tgggtgtg cagacattg altcalac tgcagcggtg cgtatttt taltcgt tctctgggg tccagctgg cctgtcgt caggatctc tgggtcca ggggtctgc actgaccagg cgtactga ccatcgt cagagctg ggtctctc tctggcgt gccctggc altcaggt tctaatt alggtalc tgggtggc tttgtatt tttgtatt calccagtt cagttgct gtcactt aacagcag ccaacccat cattactc ttcggggc ctttaggaa gcagtgcg cgcagcagc cgatctcaa gctggctc cagagggc tgcaggacat tgcctgggt gatacaga taltgtggc ttgtgaggc acccggga tgcgagaa cagctgggt tagagagga cagcctac tccatcaga taltgtggc ttgtgaggc aacctggc cgtctgt gattgtga acttctcag tctgtatt aaacagta agaggtct tggagggt aagtgagca MDPTTPAWGT ESTTVNGNDQ ALLLCGKET LIPVFLFI ALVGLVGNFG VLWLLGFRMR RNAFSVYVLS LAGADFLFC FQIINCLVYL SNFFCSISIN FPSFTTVMT CAYLAGLSML STVSTERCLS VLWPIWYRCR RPRHLSAVVC VLLWALSLL SILEGKFCGF LFSDDSGWC QTFDFITAAW LFLFMVLCG SSLALLVRIL CGSRGLPLTR LYLTLTLTVL VFLLCGLPFG IQWFLILWIW KDSDVLFCHI HPVSVVLSL NSSANPIIYF FVGSFRKQWR LQQPILKLAL QRALQDIAEV DHSEGCFRQG TPEMSRSLV tcatalacti gacattcti ttcagggcaa agtttagat acactgtgg catttccct gcalatgti gcaaatgtt ggcctgaag atcttgtt tctggcagg tgcagacti gccactagag cggggttgg tcatgtgac atggcgctc atgggtcca gtagagcagg actcaggga algctca cactatgga agaatacgt tagatcat tgaanaagg agacttgg ttaactct gcttaaat aatacalag catttggga tgaatgtga alacaggat ccalgttag atattaat gacaatac tccacagcgt gtaalat ggcaaatgt gtagcalaga tagggalga tggatcca gcalgaaat aatgtggat gccaaalgt algaattgg cttattgt attctat tggcttga aagcaaat gaagcaaat gaagccaggga tggcaalgt gccagcag gtggcaatg caagtatga tccctca cactocagg tgaactc tggcagagg acattcact ctacagtagg tctgcaag attagcaga gtgtcaat gacaactgg atggcggtc aagtgagat aataaggat ctacagtagg ggcactcag aattctgt aatttggat caagctga ggtagcaa atttcag actctgcaa aatgcaggag atgcaagg taaagctac tcaacatt gtcctggc tttatagt gtaggtctt ggttctcaa tgaanaagct cgtgtggca	A	Homo sapiens

651	191222	G Protein- Coupled Receptor Ls191222	ENSP00000199 719	QTLAMIHSIE MINNSTLLPG VKLGYEYIDT CTEVTVAMAA TLRFLSKFNC SRETVEFKCD YSSYMPRVKA VIGSGYSEIT MAVSRMLNLQ LMPQVGYEST AEILSDKIRF PSFLRTVPSD FHQIKAMAH L IQKSGWNWIG IITDDDDYGR LALNTFIIQA EANNVCIAPK EVLPAFLSDN TIEVRINRTL KKIIEAQVN VVVFRLRQFH VFDLFNKAIE MNINKMWIAS DNWSTATKIT TIPNVKKIGK VVGFAFRNGN ISSFHSFLQN LHLLPSDSHK LLHEYAMHLS ACAYVKDIDL RLHISQLAV FALGYAIRD L CQARDCQNP AFQPWELLGV LKNVFTIDGW NSFHFDAHGD LNTGYDVVLW KEINGHMTVT KMAEYDLQND VFIPDQETK NEFRNLKQIQ SKCSKECSPG QMKKTTRSQH ICCYEQNCNP ENHYTNQTD M PHCLLCNNKT HWAPVRSTMC FEKEVEYLNW NDSLAILLI LSLGIHFV L VVGIFTRNL NTPVVKSSGG LRVCYVILL C HFLNFASTSF FIGEPQDFTC KTRQTMFGVS FTLCISCILT KSLKILLAFS FDPKLQKFLK CLYRPILJIF TCTGIQVVIC TLWLFAAPT VEVNVSLPRV IILECEEESI LAFGTMGLGYI AILAFICFIF AFKGYENYN EAKFITFGML IVFIAWITFI PIYATTFGKY VPAVEIIVIL ISNYGILYCT FIPKCYVIIC KQEINTKSAF LKMIYSYSSH SVSSI	P	Homo sapiens
652	193511	EGF-Like Module- Containing Mucin-Like Receptor EMR3	NM_032571	tttttgag taggaaggt ggttgctta cggcagatga gagagcttcc agggctggct ggcgtggat accgtiaca cagaatgca gggaccatg ctcttcag ggcctgctt tgcctgagc ctcttgagc cgtgactca gaaacacaa acttctgtg ctaagtcoc ccacalgt tctgtgtca ataacatca ctgcactgc aacatgtat atacttgg atctgggag aaactatca cattccctt ggagacatgt aacgacatla algaatgac accacocat agtltatalt gtegtatlaa cgtctgtgt lacaatgtg aagggaagtt ctactgtca tgtgtccag gatatagact gcattctggg aatgaacaa tcatlaalt caatgaac acctgtcagg acaccctc ctcaagaca accgaggga ggaagagct gcaaaagatt gtggacaaat ttgagtact tctaccaat cagactttat ggagacaga agggagacaa gaaatctat ccacagctac cactatctc cgggagtgg aatcgaaaat tctagaaat gcttgaaaag atccagaaca aaaaactctg aaaaacaaa acgatagtgt agctatgaa actcaagcga ttacagcaa tgccttgaa gaaagaaaaga cattcaact gaacgtccaa atgaactcaa tggacatccg ttgcagtac atcatcagg gagacacaa aggtccaggt gccattgctt taltctata ttctcttt ggaacacatca taatgcaac ttttttgaa gagatggata agaaagatca agtltatctg aactctcagg ttgtatgagc tctatgtgga ccaaaaagga acgtgtctt ctcaagctt gtgacgttga ctttcagca cgtgaagatg accocagta ccaaaaaggt ctctgtgtc tacttgaaaga gcacaggga gggcagccag tggtcagggt atggctgctt cctgatac gtgaacaaaga gtacacacat gtgtatgtc agtcacctgt ccagcttgc tgcctgag agcttgacca gccaggagga ggaatcccggt ctagctgtca tcaactact ggggctgagc gtctcttgc tgccttct cctggcggcc ctactttc tctgtgtgaa agocaccag aacaccagga cctcactgca tctgagctc tgccttgc tctctggc ccactctc ttctctgtgg ggaatgtacg aactgaacc aagggtgctgt gtccacat cgcgggtgt ttgcactc tcaactggc cgccttacc cgccttacc tggatgtgtc tggagggtgt gcactctc ctactgcac ggaacctgac agtggtaac tactaagca tcaatagact calgaatgtg alcatgtcc cagtcggctc tggcgttccc gctgtgactg tggccattc tgcagcttcc tggcctcacc ttatggaaac tgcgtatgca tgcctggctc accctggacca gggattatc tggagttcc tggccaggt ctgtgcat tcttctgca attatgtat gtatgtgt gcttttggaa ttgtgaaag aaaacttcc tccctcaata gtgaagtgtc aacatccag aacacaaagga tgcctggctt caaagcaaca gctcagctct tcatctgggg ctgcacatgg tgcctgggt tgcataaggt ggggtccaggt gccacaggtca tggcctactc ctccacalc	A	Homo sapiens



Homo sapiens

P

NP\_115960.1

EGF-Like  
Module-  
Containing  
Mucin-Like  
Receptor EMR3

193511

653

atcaacagcc tccaaggctt ctctctctc ttggtctact gctctctcag ccagcaggctc cagaacaat atcaaaagt  
gtttagagag atcgtaaat caaaatctga gctctagaca tacacactt ccagcaagat gggctctgac tcaaaaccca  
gtgaggga tgtttcca ggacaagtga agagaaata taaaactag aatattcaac tccatatgga aatcatatc catggtatc  
tttgccatta tgaagaatga agctaaggga aaggaatc ataaacata tcatcttgg agaggaagta atcaacctt acttccaag  
ctgttttc tccacaatag gcttcaaca aatgttgt aatitgati tcttcaaa aaaaaa  
MQGPLLLPGL CFLLSLFGAV TQTKTSCAK CPNASCNN THCTCNHGYT  
SGSQKLFTF PLETNDINE CTPYSVYCG FNAVYNVEG SFYCQCVPGY  
RLHSGNEQFS NSNENTCQDT TSSKTTEGRK ELQKIVDKFE SLLTNQLWR  
TEGRQEIST ATTILRDVES KVLETALKDP EQKVLKQND SVAIETQAIT DNCSEERKTF  
NLNVQMNSMD IRCDIIQGD TQGPSAIAFI SYSSLGNIIN ATFFEMDKK  
DQVYLSQV SAAIGPKRNV SLKSVTLTF QHVKMTPTSK KVFCVYWKST  
GQGSQWSRDG CFLIHVNKSH TMCNCSHLSS FAVLMALTSQ EEDPVLTVIT  
YVGLSVSLC LLLAALTFLL CKAQNTSTS LHLQLSLCLF LAHLLFLVGI  
DRTEPKVLC IAGALHYLY LAAFTWMLLE GVHLFLIARN LTVVNYSSIN  
RLMKWIMFPV GYGVPATVA ISAAWPHLY GTADRCWLHL DQGFMSWFLG  
PVCAIFSANL VLFILVFWIL KRKLSLSE VSTIQNTRML AFKATAQLFI  
LGCTWCLGLL QVGPAQVMA YLFTIINSLO GFFILVYCL LSQQVQKQYQ  
KWFEIVKSK SESETYTLSS KMGPDSPSE GDVFPQVKR KY  
KHAYICLAI WAYASFWTIM PLVGLDYP EPFGTSCTLD WWLAQASVGG  
QVFILNLF CLLLPTAV FSYVKIAKV KSSKEVAHF DSRIHSHVL EMKLTKVAML  
ICAGFLIAWIPYAVSVWSA FGRPDSIPQ LSVVPTLLAK SAAMYNPIIY  
QVIDYKFACC QTGGLKATKK KSLGFLRLHT VTVRKSSAV LEIHEEV  
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ggcgcgagg cggcgcgct agtctatc cgtggcgagc tcatgaacag ccgtctcgt ggtctgttca gcalcgacc

Homo sapiens

P

CAC21687.1

G Protein-  
Coupled Receptor  
d1402H5.1

193516

654

Homo sapiens

A

NM\_001407

Cadherin EGF  
LAG Seven-Pass  
G-Type Receptor  
3 (CELSR3)

193524

655

[illegible]

[illegible]

[illegible]

656	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	<p>gcaaggag cagaacaag ggaattcaag accagaalg taggtgccac tgcctctat gttacagga tccctcgagg ccctaggcac clgggtgca ggaagtact ccgtccact cctcttlat tccctaaa agggaaaaat gactgtacg accgtgtca caaaactt actttgtca ttgtgtgc tgcagaac gaagactt aaaaattgt tactgttac aagtcagat tcaaaaaag ttittacti gttacaact caaaacttg agttttac ttgtttac gtatataat ttittctt tttttcaag tgaaggag ggaagtgg agaaggact ggaaggacca cclgtgagga cclgtacctg gccatctga ggggtttct aaccaccag tctccaggc cgaaggtag cclgtgacc cgtttacag cagalccaga agaccttgag agtaggcgtc ctctaacac gggggagagt ggcgtgtag ggcgtggggg tggcgtgag agacacctc taccacca cccatgcat actttggga agcagcttc tgggagatg gaaattctac ttcctgact ggaagctt gggggggga ggggtgtt actatgctt ctctctac cgagaaggac ccagctt ggaaggctga gggcgtt gggggggga ggggtgtt actatgctt agggttgta galgccctc tclgggttc cctctcca gccagcggc cctcttct gtcgtgtga atgttcgt ggaagcggc tctgtttgg gaataaact ctatagaaa caaaa</p> <p>MMARRPPWRG LGERSTPILL LLLSLFPLS QEELGGGGHQ GWDPLAATT GPRAHIGGGA LALCPSSGV REDGGPGLGV REPFGVLRG RRQSARNRG PPEQNEELG IEHGVQPLGS RERETGQPG SVLYWRPEVS SCRTGFLQR GSLSPGALSS GVPGGNSP LPDFLIRHH GPKPVSSQRN AGTGRKRVG TARCCGELWA TGSKQGERA TTSGAERTAP RRNCLPGASG SGPELDSAPR TARTAPASGS APRESRTAPE PAPKRMRSRG LFRCRFLPQR PGPRPPGLPA RPEARVTSANRARRFRRAAN RHPQPPQYNY QTLVPENEA GTAVLRVVAQ DPDAGEAGRL VYSLAALMNS RSLELFSIDP QSGLIRTA AAA LDRESMERHY LRVTAQDHGS PRLSATTMVA VTVADRNDHS PVFEQAQYRE TLRENVEEGY PILQLRATDG DAPPNANLRY RFVGPAAARA AAAAFAEIDP RSGLISTSGR VDREHMESE LVVEASDQOQ EPGPRSATVR VHTVLDEND NAOQSEKRY VAQVREDVRP HTVVRVTAT DRDKDANGLV HYNISGNSR GHFAIDSLTG EIQVVAPLDF EAEREYALRI RAQDAGRPL SNNTGLASIQ VVDINDHIPI FVSTPFQVSV LENAPLGHSV IHQAVDADH GENARLEYSL TGVA PDTFV INSATGWVSV SGPLDRESVE HYFFGVEARD HGSPPLSASA SVTVTVLDVN DNRPEFTMKE YHLRLNEDAA VGTSVSVTA VDRDANSAS YQITGNTNRN RFAISTQGGV GLVTLALPLD YQERYFKLV LTASDRALHD HCYVHINITD ANTHRPVFS AHYSVSVNED RPMGSTIVV SASDDVGEN ARITYLLEDN LPQFRIDADS GAITLQAPLD YEDQVYTLA ITARDNGIPQ KADTTYVEVM VNDVNDNAQ FVASHYTGLV SEDAPPFTSV LQISATDRDA HANGRVQYTF QNGEDGDGDF TIEPTSGIVR TVRRLDREAV SVYELTAYAV DRGVPLRTP VSIQVMVQDV NDNAPVFAE EFVVRVKENS IVGSVVAQIT AVDPDEGPNH HIMYQIVEGN IPELFQMDIF SGELTALIDL DYEARQEVY VVQATSAPLV SRATVHVRLV DQNDNSPVLN NFQILFNYYV SNRSDTFPSG IIGRIPAYDP DVSDHLFYSF ERGNELQLLV VNQTSSELRL SRKLDNNRPL VASMLVTYTD GLHSVTAQCV LRVVIITEEL LANSLTVRLE NMWQERFLSP LLGRFLEGVA AVLA TPAEDV FIFNIQNDTD VGGTVLNVSF SALAPRGAGA GAA GPWFSE ELQEQLYVR AALARSLLD VLPFDNNVCL REPCENYMKC VSVLRFDSSA PFLASATLF RPIQIAGLR CRCPGFTGD FCETELDLCY SNPCRNNGAC ARREGGYTCV</p>	P	Homo sapiens
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DTEAGRCV PGVCRNGGTC TDAPNGGFR CQPAGGAFEG  
 SSFVFRG LRQFHLTSLSFATVQQSG LLFYNGRLNE  
 QVRLTYST GESNTVVSPT VPGGLSDGQW HTVHLRYNKN  
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 KLHFCDSGP CKNSGFCSEWGSFSCDCPV GFGGKDCQLT  
 TSWNFGSD MAVSPWYLGLAFRTRATQG VLMQVQAGPH  
 SVTVTRGS GRASHLLLDQ VTVSDGRWHD LRLELQEEP  
 LDFSLFQDT MAVGSELQGLKVQLHVGG LPPGSAEEAPQ  
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 NIMLSIDR MEHPSPRGA RRYPRYHNL FRQDAWDPH  
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 RLQNPVMN SPVSVAVFH GRNFLRGILE SPISLEFRLL  
 WDPPLAE QHGVWTARD ELVHRNGSHA RCRSRTGT  
 LEGDELLA VFTHVVAVS VAALVLTAAI LLSRLSKSN  
 LGVAELLFL LGHRTNQL VCTAVAILLH YFFLSITFAWL  
 VEPRNVDRG AMRFYHALGW GVPVLLGLA VGLDPEGYGN  
 IWSFAGPV VLIVMNGTM FLAARTSCS TGQREAKKTS  
 VSASWLF GLLA VNHSL AFHYLHAGLC GLQGLAVLL  
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 AMFHRDAGA DSDSDLSL EERSLSIPS SESEDNGRTR  
 SERLLTHP KDVDGNDLLS YWPALGECEA APCALQTWGS  
 ANNNQDP ALTSGDETS L GRAQRKGI LKNRLQYPLV  
 RAATLGRH AVPAASYGRI YAGGTGSLSPASRYSSRE  
 ERLEEAPA PVLRLSRPG SQECMDAAPG RLEPKDRGST  
 AMAGRFGS RDALDLGAPR EWLSTLPPR RTRDLDPQP  
 DPLPSRP LDSLRSNS REQLDVPSR HPSREALGPL POLLRAREDS  
 LDILSSIL ASFNSSALSS VQSSSTPLGP HTTATPSATA SVLGPSTPRS  
 EVPRSEGH

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A

cca gctcccaac agcagttggc cctaagica gaalgggact aacactggagg ccaccggc  
 t octactatca gcacacccoc cctgtggcgg ccatgtcat tgggcatct ggcctcatct tctgtctg  
 tgg tctgtcat cgtgtcaag aaccggcata tgcatactgt caccacatgt tcatctca

658	193914	Neuropeptide FF 1 Receptor	NP_071429.1	<p>accctggctgt cagtgagacttg ctgtgtgggaca tctcttgcal gccacacacc ctgtggagaca accctcalcac tgggttgccc ttcgacaatg ccacatgcaa gtagtagcggc ttgttgacagg gcatgtctgt gtctggcttcc gttttcacac tgggtggccal tgctgtggaa aggttccgct gcatgttgca cctttcgc gagaagctga ccttcgggaa ggcgtcgtc accatggccg tcatctgggc cctggcgctg ctcalatg gtccctgggc cgtcacgctg accgtcaccc gtagaggagca ccactcalg gtggagccgc gcaaccgctc ctacccttc tactctgt gggaggccctg gcccgagaag ggcatacgca gggctacac cactgtctc ttctcgaca tctactggc gccgctgggc ctcatgtgg tcatgtacg ccgcatcgcg cgcaagctct ggcaggccccc gggcccgccc ccggggggcg agtagggctgc ggaocccgca gcatcgcgcc gtagagcgcg cgtgtgtgac atgtgtgtca tgggtggcgt gttctacg ctgtctggc tgcggctcgt ggcgctcgtg ctgtcalcg actacgggca gtctagcgcg ccgcatgctg accgtgtcac cgtctacgoc ttcccctcg cgcactggct ggcctcttc aacagcagcg ccaacccat calctaggc tactcaacg agacttccg ccggcgctc caggccgocct tccggcccg cctcggccc cgcccgctgg gtagccaca gtagggctac tccgagcgcc ccggcgggct tctgcacagg cgggtcttgg tgggtgtgcg ggcaggagc tccgggctgc cctctgagtc gggccctagc agtggggccc ccaggcccg ccgctcccg ctgagggaag ggcgggtggc tcaccaggc ttgccaggg aaggccctgg ctgtccac ctgcccctca ccatccagc ctggatctc tga MEGEPSPPN SSWPLSQNGT NTEATPATNL TFSYYQHTS PVAAMFIVAY ALIFLLCMVG NTLVCFVLK NRHMTVTNM FILNLAVSDL LVGFCMPTT LVDNLITGWP FDNATCKMSG LVQGMSSVS VFTLVAIAVE RFRClVHPFR EKLTLRKALV TIAVIWALAL LIMCPSAVTL TVTREEHFM VDARNRSYPL YSCWEAWPEK GMRRVYTTVL FSHYLAPLA LIVVMYARJA RKLQAPGPA PGGEEAADPR ASRRRARVVH MLVMVALFFT LSWLPLWALL LLIDYGQLSA PQLHLVTVYA FPFHWLAFF NSSANPIYG YFENFRRGF QAAFRARLCP RPSGSHKEY SERPGGLLHR RVFVVVRPSD SGLPSESGPS SGAPRPGRLP LRNGRVAHHG LPREGPGCSH LPLTPAWDI</p>	P	Homo sapiens
659	194319	G Protein- Coupled Receptor FLJ22684	NM_025048	<p>agatactgat actcttct caacagcat aagaatgat tgagccaca gatactgaa ggaaggctgc cctcgagttg tgggtgaag agataaaca ccagtcacag actatgcacc cgaactgctc tgtcagctc aggggaaaaag aagttggag tgctgtggt cacttctc ttaccctca ctgacggcca cgggtggctc ctgggggaaa atgatgacat caaaacaaaa aaagaaactca ttgtgaataa gaaaaaacat ctaggcccgag tggaaataa tgcgtcgtc ctacaggta cctataga ttccaggag aaagagatt tgaataatt tctgaagctc ttgaagctc catattatg gtcatggg ctattagaa ttatcagagc aaaggctacc acagactgca acagccgaa tggagctcgt aggttaccct gtagagacag ctacacctgg ttctccct catgcttga tcccagaac tctacctc acagggcgtg agcactcca agctgtgaaat gcatctcaa caacctcagc cagagtgca attcttga gaggacaag atttgggcca cttcaaat taatgaaga ttacaaag acctttga ttatctct gctatatac ccaaatatgc aaatgaaat gaattcaac ttaaaaaagc atatgaaga attcaagtt ttgagtcggc ttaggtcacc caatttga ttgtactct gtgcccgaag ttggagtgca atgggacat ctaggctcac tgcacacctg caacctcgtc ctaccgggt caagagattc ccttgctca gccctccaag tagctggaaat taccggcacc tgcaccaca tccagctaac ttttttga ttttttag agacagggt tcaactgt ggccacatg gtctcaact cctgacctca ggttaccgc ctgctcggc ccccaaag ctgggtttac aggcagtagc caccacat ggcctagggac cttaaatat ggaaagcalt ctcaaaactg tgggtcagtg agtagaacia caaaacaata gcatgtaggc agaaacttga aagaaaggcag gtagatagg tgcagtgga tgggaaaaag tgaagggttg gataagggt ttgcgggttg cgaagggttg attttctc tcaagcaacta caggagat gattctcat aattcggagc cagaagtggt gcttgggttg agatcttt gcacagataa catgtataa tcalatga aaaccagta gtcattgtt acagcaata aagaatatt tagtaata aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaaaaa aaa</p>	A	Homo sapiens

660	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	MKVGVLWLIS FTFIDGHGG FLGKNDNDIKT KKLIVNKKK HLPVEEYQL LLQVTYRDSK EKRDRLNFKL LKPPLL WSH GLRIIRAKA TTDNSLNGV LQCTCEDSYT WPPPSCLDPQ NCYLHTAGAL PSCCHLNNL SQSVNFCERT KIWGTFKINE RFTNDLLNSS SATYSKYANG IEIQLKKAYE RIQGFESVQV TQFRMSLLSP KLECNGTI	P	Homo sapiens
661	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NM_030774	alagattctt gcaactcac aacagccacc ttigtctta ttggatccc aggatlagag aaagcccatl tcgggttgg cttcccctc ctttccatgt atgtatggc aatgttggc aactgcaicg tegtctcat cgtaaaggacg gaacgagcc tgcacgtcc gatgacctc ttctctgca tgcitgacg catggacctg gccatacca catccacctt gccaaagac cttgccctt tcgtttga ttcccagag atagcttgg aggcctgtct taccagatg ttcttatc algccctc agccatigaa tccacctc tgcctggccat ggccttgac cgtatgtgg ccatlgcca cccactggc calgtcgag tgcatacaa tacagtaaca gccagatg gcatctggc tgtgttggc ggatccctt tttttccc actgctcig cgaalcaagc ggctggcct ctcacatcc aatgtctct cgcatctta ttgtgtcac caggatgaa tgaatggc ctagcagac acttggcca algttgata tggcttact gccatctgc tggcatggc cgtggacgta algtcalct cctgtctta ttctgata alacgaacgg tctgcaact gccatccaa tgcagcggg ccaaggcct tggaaacct gtgtcacca ttgtgtgtg actgcctc talgtggcc ttatggcct ctagtgta caccgttg gaaacagct tcatccatt gtcgtgtg taltgggga catctacct ctcgtctc ctagtcaa tccatcac talgtggcca aaacaaaca gatcagaaca cgggtgtcgt ctagtcaa gatacgtgt gacaaggact tgcaggcgtt gggaggcaag tga MSSCNFTHAT FVLIGIPGLE KAHFWVGFL LSMYVAMFG NCIVVFIVRT	A	Homo sapiens
662	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	ERSLHAPMYL FLCMLAIDL ALSTSTMPKI LALFWFDSRE ISFEACTQM FFIHLSAIE STILLAMAFD RYVAICHPLR HAAVLNNTVT AQGIVAVVR GSLFFFLPL LKRLAFCHS NVLSHSCYVH QDVMKLAYAD TLPNVVYGLT ALLVMGVDV MFISLSYFLI IRTVLQPSK SERAKAFGTC VSHIGVVLAF YVPLIGLSVV HRFNGSLHPI VRVVMGDIYL LLPVVPNII YGAKTKQIRT RVLAMFKISC DKDLQAVGGK	P	Homo sapiens
663	194743	FLJ14454	NM_032787	actttttca tgtctctt gagtgaagg tggagaaat gaaagcagag tatgcacct ttatggag attcaactg catctactg gattagctc aaagttcta aaatataaag acatccatc gacagatcac tgaaggagg actgtttt cgttttga atagtctc attaaactt ttactcaag aagaataaaga gctagtatt tctaccag ggtgtggtt ggtgttggc ttaccatgg cttctgccc tgcctggaac cttagggtgc tgtgtgtgt cgtgtgtgga ctactgact gcalcatitt gggactgggc atctggagga ttgtgtcag gatccaaaga ggaatactia ctctccatc aagcacccct acagagttct gcaggaaagg tggaaacctg gaaatggca gatgtattg tacagaaggag tggaaaggac tgaagatgac aatgtctaatt ttgtgaaa atagtacct talgggttt actttggcca gaatccagt gggcagatat ggaacatct tgcataacat tggcaacatg actccaalg cgggcaaloc aalggcagtc cgtgtgtgca gtctctct atatggagag alagaattac aaaaatgac aataggaaat tgcatagaaa atctggaaac cctggaaaag caggtagagg algtcacag accactaat aacatttct ctagaagatc gatttlaaca tctgaltgcca ataaatlaac tgcitgaaac atcactagtg ctacgcagt ggttggcag alattcaaca ctccagaaa tgccttacct gaggcaaga aggttggcat agtaacagtg agtaactcc tagatggcag tgaatgct tticaagag ttctgtctac tgcataatgat galgocctia caacgcttat tgaagaaatg gagactatt cctgtctt gggatlaaca tgcaggtgg aaactaatal agcaatcac tgcagaaat tctctcaga aaatgcgtg gggcttcaa algttgcct cctgtgcag aaaggagctia gcagtctct agtttctagt tcaacattia tatalacaaa tgtgtgtggc cttaacccag algtcacag tgaagtcag gcttgcctia atatgagaa aaattacac aagacalgcg cgttctagt ttaacaaat gacaagcti tccatacaa aactttica gctaaatcgg attttagtca aaaattatc tcaagcaaaa ctgatgaaa tgaagcaagat cagatgtct cgtttgacat ggtctttagt ccaagtaca accaaaaaga attcaactc latctctalg cctgtgtctia ttggaattg tcaagaaagg actgggacac atatggcgt caaaaagaca agggcactga tggattctc cgtgtccgt gcaacalac tactaattt gctgtatlaa tgaatticaa aaaggattat caalatcca	A	Homo sapiens





666	194745	G Protein- Coupled Receptor SLT/MCH2	NP_115892.1	<p>aaccatttg actgacacgt tggagaacaa gglaacagac catccggatc aattggggc ttggggcagc ttctttalc  ciggcatgic cigtggtt clactggag gtcataa tlaagagcgg tgtgagagt tggcttttg attgacatc cctgacgat  gtacttggt alacacttta ttgacgata acaactttt ttccctct accctgatt ttgggtgct atatttaatt ttatgctat  acttgggaga tgaataaca gaataaggat gccagatgct gcaatccagc tgaatccaaa cagaragta tgaagttag  aaagatggg cgggtgctg tggagtctt tatctgagt gcggccctt atcatgat acaactggg aactacaga tggaaagoc  cacatggoc ttctatgg gttataact ctcactgt ctagctag ccagcagcag catlaacct ttcttaca tctgctgag  tggaaattc cagaacgic tgcctcaat ccaagaaga ggcactgaga aggaatacaa caatagaga aacactcga  aatcacatt ttgaaagt acatgaltca ccatgctt agcatgatt gtacttta ctgatttat tagaaaggcg aggtgaccc  atatgttat gccattct ctgtgact ttgtacttt agcagcagg aagagaagc taacacaga aataacatga gcttaatag  ctaactgaa aaaaaaaa aaaaaaaa</p>	<p>Hom sapiens</p>
667	194756	Chemokine Receptor FKSG80/GPR81	NM_032554	<p>mnphascwn tsaellnksw nkefayqtas vvdTVILPSM IGIICSTGLV GNILIVFTII P  rsrkkTVPDI YICNLA VADL VHIVGMPFLI HQWARGGEWV FGGPLCTIIT  SLDTCNQFAC SAIMTVMSVD RYFALVQFPR LTRWRTRYKT IRINLGLWAA  SFILALPVWV YSKVIKFDG VESCAFDLTS PDDVLWYTYL LTITFFFPL PLILVCYILI  LCYTWEWYQQ NKDARCCNPS VPKQXVMKLT KMLVLVWVF ILSAAPHYVI  QLVNLQMEQP TLAIFYVGYL SICLSYASS INPFLYLLS GNFQKRLPQI QRRATEKEIN  NMGNTLKSHP</p>	<p>Hom sapiens</p>
668	194756	Chemokine Receptor FKSG80/GPR81	NP_115943.1	<p>MYNGSCCRJE GDTISQVMPP LLIVAFVLGA LGNGVALCGF CFHMKTWKPS  TVYLFNLAVA DFLLMICLPF RTDYLLRRRH WAFGDIPCRV GLFTLAMNRA  GSIVFLTVVA ADRYFKVWHP HHAVNTISTR VAAGIVCTLW ALVILGTYYL  LLENHLCVQE TAVSCSFIM ESANGWHDIM FQLEFFMPLG ILFCFSKIV  WSLRRRQQLA RQARMKKATR FIMVVAIVI TCYLPVSVAR LYFLWTVPSS  ACDPSVHGAL HITLSFTYMN SMLDPLVYYF SSPSPKFYN KLIKCSLKP</p>	<p>Hom sapiens</p>

669	194757	G Protein- Coupled Receptor Ls194757	AL162032	QPGHSKTORP EEMPISNLGR RSCISVANSF QSQSDGQWDP HIVEWH	A	Homo sapiens
<p>gfcalgaggt gctgcacgg gagctctgg agagtcggag acgtaaagcag cacagfaggg ccaccaacag cagcaaccga  gcttcgtgt actgcgctt cctggactt agctccggag aaggggtctg gtcgaaccac ggctgtgctg taccgagagg  aaactcac tactcgtct gccgtgac tcactcac aacttgcca tctcatgca gggtgtcgg cggaggtca  acattggcat cctatcgt gtagacagag tcatctaca galtcagcgc gacaactaca agaltccatgg agacccagt  gocctcaagt tgaagggcaa ggcaagtggcc gctgtgctgc ccactcggg taccctggg gctttggcg gctgtcgt  caacgggtgt gctgtgttt tccagtacat gtttgccag ctaactcc tgaaggagct gttcatatc ctttcatt gctctcga  ttcagaggtg agagccgct tcaagcaca aaaccaagg gctgtcctca ctagcagctc cgcgcgcac tccaacgca  agoccttcca ctcggaccic algaalgagga ccggccagg catggctcc accaagctca gcoctgggga caagagcagc  cactcgcg accgcctga ccttcagcc gctgagccg gtaggcctgg aaccaggcca ggctgcgctc agaacaccc  ccccaaaca gaalgaaalg cccacottt gccalggag cctctctg cctgtctc gacalgggtg ttgtggcccc  gagacagctg tctccctg tgaactggc gctggagca cactcag ctagcagcc gtagccagcc gtagccagcc  gocctcctg cttgcatcca cccgtgggt gtagctc ctagggagat tccagggaca cagtggctg actgtgag  tgoccttag cctccctca tcatcagca tcaagaccag ctagggcagg acatcgggg ccggctccgc agcaccagga  ggggatgtc agocctcctg cctgtgtgg gctggggag tcaaggccaa agaggtgtt caggtcccca cgcacctca  gtcaggccga ggcaagctgg ggtgtgtgtg gaagagcatg ctaggtccc agtgtcga tccactgagt ggtgagttcc  ccagcccg cctagccgt ggtgtgtgtg tctgtgtgtg gctccggct gggccaaact gctgtgtgtg altcagttgg  ggocctcgc caagccagc tctgagccgt ggccggagct gttgactc caggtgaggg cgaacctct gocctgtct  tgccggggc cctcctc acgtgaagag ccgtcctggg cctgtggct gctgtgtgt gctgtgtgt gggggagct  ctcggccatc cgtgtgagt ttgocctt tggaccccaa ttggccca agatggctc cctcctgctg tgcagccct cttgtgt  ctggggcaac agtagctggc cgtgtcccg cagtgcctgg gttccaggtg gaagtggag ggcatttcc agggcactg  ttcccgga ggcctcca tggctcag gactctac aagtictaa tggggagacc ccggggcagg tagcaggtg  cgtcctgt ggtcaccag agaccact gctgtgtgtg cctcctg cctcctg tgaagggga gggtgtgtg cagccgtgtg  ttctgtgt agggaaatt atggactcag actcagccc agagggagag ggaatattgt taltggacca tgtgtggca  tgalcctgt gaaacaggt ttgggtatc agatgtaat taagaccca ccgagatag gctgtgtgag ttcatcgt  gctgtagca cctgtgtgt cgtgtgaalg tgggtgaagc altcaaacct ggtttgata ctggaaact ttctttaa actgtgacca  tgatttatt cagccctcc acacccctat gctgtgtgt tttaggtg agtttctat gtagccctg gocctttgc agccaccig  gtggctct aaltgaact ttccctgt cgtgtgtgt gtagccacta tctgtagcc tctcctgcat gggggagggta  ggcaggggagc agcatgtct caggggtgaa ccttgtct tctgtcaggg gtagccagcc ctagccagc cactgtccac  altgtgacag tggccgggc cctgtgtg gocctgtcaa cgtgtgtg gctgggacac ctagctgtc cagggcaagg  ccgtgtca gtagagagc ccalgttag taltgactaa agtccatgt tttagccag cccagggctc ccgtgacccc  agaaacagg tcataggac cacagtgcca gactcalt ccggccggta gacactagaa gtagaagac tgaltocta  caatgtacac ttggaatt ccttatt agttctagt gaaacaaatc agtagaggaa ctactttag tttagatgga attattgt  ttaattgt gccgtatca tcatatag taatattca agtagagaa tgaacaaac cgtctaac ctttgttc caatgaalga  aagcatgca cttattat aggcctatg ttgtgtc tgcagtact ttattatca tacaattt ggccaaaaat aagaaatgg  aagaaatgaa altgttgtt taltgagaa gaagatgat gacactaagt tggtaataa tgtgtgtt ttatgaat aaactcalt  cctgaaaaa aaa</p>						
670	194757	G Protein- Coupled Receptor Ls194757	CAB82385.1	HGVSARDVLE SRTRKQHEA TNSSNRVFVY CAFLDFSGE GVWSNHGCA TRGNLTYSVC RCTHLTNFAI LMQVVPLEVN IGLIAVTRV ISQISADNYK IHGDPSAFKL TAKAVAVLLP ILGTSWVFGV LAVNGCAVVF QYMFATLNSL	P	Homo sapiens

671	194858	G Protein- Coupled Receptor LS194858	LG94710	QQLFIFLPHC LLNSEVRAAF KHKTKVWSLT SSSARTSNAK PFHSDLMNGT RPGMASTKLS PWDKSSSAH RVDLSAV	A	Homo sapiens
672	194858	G Protein- Coupled Receptor LS194858	ENSP00000053	ttagtcaag tcaaggctga cactgttgg gctgtctggg tggtaggcaa tgcctggggcc gggactgtcc cgggaggctc ttcccacag cccctgcagg cactttggg cggctgccc ctagggggctt ggttagcgct gctgcgccag cccatggct acggggcactg ccgtctgcat ggcacttct agggagaggga gggacacag tgtccacagg cccagtggcg ggcctgctc ataggccagg actgagaggga gacgtgtggc cacttagggc cccacagaca gcccggaagag cagcatggct ctagcctgtg ccctgtctg cctccaggta agggccggg ccaggggcgga gggctcactg cggcacactg cccgctccag ccggcagalg tctgtcagct ggcgggtggg agtggccagc acgcggaagc agaggaaggg agcacacc accggcgggca gacaggagcc atagacttg aggtacaggt agggggctgg gaaagatagcc tgggagctg agtggacc aggggtccag tggttacc ccagagcggg cagactggca aagagcaggg gaccagcca ggttagggc agggccagc gaaagctcc agggggctgg agtggctca ggcctgcat gtagcctcc ccgtgcacca gcaagaggtt ggcagcagg gtagaggaagg aaggttggg agocaaagtag acgaggaggc aggaacagta acccgggcga cctgttcc acagccctgg caatgtgggc aatgocagc ccgttagagcag ccagccagc agtagggctca ggaagaaagca gccagcaggt gggctgcgca ggcggcggtc ccaggcagtg ccaggggcta ggaagcaggt cgggtgtag atgagcctg ccaggccag ggaagagccc aagggccagc cggcatg gctggggacc tgcagctg tgtggcgct cactgtg ctagggagc ggaagctct gtagctctg gtagcagc cggcatg QDTRHGNRC RAGCSNLT LKQAQQAIP APNSHACRLP LQDSPVPRTK	P	Homo sapiens
673	194878	MrgX3 G Protein-Coupled Receptor	AY042215	MTPNSTGEVP SPIPKGALGL SLALSLIT ANLLALGLA GTAACAATCW LLLPEPTAGW AAHGSGLATL PGLWNQSRG YWSCLLVYLA PNFSLSLA NLLLVHGERY MAVLRPLQPP GSRLALLT WAGPLLFASL PALGWNHWTP GANCSSQAIF PAPLYLEVY GLLLPVAVGAA AFLSVRLAT AHRQLQDICR LERA VCRDEP SALARALTWR QARAQAGAML LFGLCWGPVY ATLLSVLAY EQRPPLPGT LLSLSLGS SAAAVPVAMG LGDQRYTAPW RQPKGACRG CGEPPGTVP APALPTTQAA KAVSTWT	A	Homo sapiens
				tcaaggccag gataagata tcatgggct cagagcactg gctagatag tgggggggtt ttgatctaa tgtatctcc atgttagcac agaatgttg tggcagtaga gaaaggtcag gcttagagt cagcaagaac tggatttcaa actggattg aggacccca cctttgata ggtgactat tctgttag tctctgact gcccttta aatgaggaag taaatccac atggcagggt ggtagggaga atcagaatc atacagctgg tgaacaaac tggtttgt ttccagggtc accagactgg ggtttctgag cattggattca accatccag tctgggtac aagactgaca ccaatcaac gacgtgagga gactcctgc tacaagcaga cccttagctt cagggggctg acgtgcatcg ttccctgt cgcgtgaca ggaagcggcg ttgtgtctg gctcctgggg tggcgcatgc gcaaggagc tgtctcatc latatctca accgtgtcgg ggcgggactt cttctctta ggcggccat tatatgtc ccgttagcc tcatatatt ccggcatccc atctcaaaa tcttagagcc tggtagacc ttccctact ttataggct aagcagctg agcgccatca gcaaggagcg ctgctgtcc atctgtggc ccatctggta ccactggccg cggcccgat accgtgcatc ggtagtgtgt gctctgtct gggccctgt cctgtgccc agtatccctg agtggatgtt ctggactt cgttttagtg ggtgtgattc tgttttgtgt gaaacgtcag attcattac aatgcgtgg ctgggtttt tatgtgtgt tctgtgtgg tccagccctg tccgtgtgt caggattct tggtagtccc ggaagatgcc gctgacaggg ctgtacgtga ccatctct cacaagtgtg gttctctcc tctgtggctt gcccgtggc attcagtggg cccgttttc cagggatccac ctggatagga aagcttatt ttgtcagtg catctagtt ccatttctt gtcgtctt aacagcagtg ccaacccat catttact ttggtgggtt cccttaggca gcttcaaat aggcagaacc tgaagctgtt tctccagagg gctgtgcagg acagccctga ggtgtgagga ggtgtgggggt ggttcttca ggaagccgtg gagctgtcgg gaaagcagat ggaagcagtg ggaagaaacct ctggccctgtc agacagagact ttgagagcga tgcgtccctg ccacccctga caattatag cattttct agccctctgc ctcaagaaatg		

674	194878	MrgX3 G Protein-Coupled Receptor	AAK91806.1	MDSTIPVLGT ELTPINGREE TPCYKQTLSE TGLTCIVSLV ALTGNAVVLW LLGCRMRRNA VSIYILNLVA ADFLFLSGHI ICSPLRLNI RHPISKILSP VMTPFYFIGL SMLSIASTER CLSILWPIWY HCRPRYLSS VMCVLLWALS LLRSILEWMF CDFLFSGADS VWCETSDFIT IAWLVFLCVV LCGSSLVLLV RILCGSRKMP LTRLVYVITLL TVLVFLCGL PFIQWALFS RIHLDWKVLF CHVHLVSIFL SALNSSANPI IYFFVGSFRQ RQNRQNLKLV LQRALQDTYPE VDEGGGWLPQ ETLELSGSRL EQ	P	Homo sapiens
675	194903	G Protein- Coupled Receptor GPCRB3	LG100657	tcagggtggag ccgcagagccc tgggtgtagc ctagatggag gccctggaaagt gctctgtagt gttgagggtc ggccggcaga ggatcacgta gcatctaggc agaaataacc caccgaagcc gctgctcagg ctagtcagcc cagccatcat gttggccgca ggcaggtagt tggcgtcgtg gacgctggcc ggggtgtaga aggcgtagcca ggacacgaaag ttgaaagagca ggtctgaagt gacacattg gccctggtt agttctctgg caagtcccta cccaggtagc tgcaggagaaa ggacatgalt ggagaggtagc cattgtagag gaaaggccagt algaagccca gggaagtgggt cttgtagcac tcaagcatca ccagatgggg ggagcgcctgg tatccctag caggcagtag gggtcacacc accagcccaag ttgtagagat aagcagctgg gccgcctgagc tgalcatc aaacaggcca gcacccgtgggt ttggacccta ggccgtggtag aatgtaggta ccttggtaga aaacttgaaag altgtagta gttggtagag gcgaaactgic aggcagtaga gtagaagtgggt gaaacccaagg gcacaaaggagg cctggcgttag caagcacgca ggccttgggt gttcccaaa gaagccatag aggtctggcac tactctgic caggtagagccc agcalaaagaa agcacaggcc gccccctgct gacctacca cagggggtgic taggtggcag gccaaacaggc cagcagctcc aagcagcagc agcacgca gctgtagag tgcagcagc acccaagagg tggctcagc caaagccaaa aaacaccagc tgcgcgggggaa gcaaggctgg ctccctcag gttccctac ttttccca caaggctggc altgtagag gttgtagagg gaaaggccaaag aaggttcctg aggagccagt gaggcagtag gtagaagtagaa ataggggccct gcaagttagt gtagaagtgg tactcagagcca gctagactat actaggcata gttggtaggg gtagagccggg agtggggccct gaggccagc attcttcaa aatgctctg ttaattacag actctggtag cacacagct ggttctgtag ggtcagtag cccatggagg tttggcaac octaggggagg accttaact ggtagctcgc cccataacc agtagagtag ctagctgtag ggagcagcct gctcccaagg gaggggcattg taacctct ccttgccag cattccatg aaccattc ctgagctgct gctctgtagt tctctgtag cctgacccc tggaggacaga aggggaagt tctctgctt acagtagagg tagaagtagaa gaagtggcc cctgggaccc aactaaggtag ctgagctct agctaccaa ttggctct gttctgacc ttgattct ggagggggaa tgcgtttt ttctctgic cagacagct agtatctgta ttcaggccaa gctgttcaag gtagctagctg tcttggcat gggaacaga agggtagagta gtagaagtag ggacaaagg gcaaalagct atattcatt agagaaagag gtagaagtag gctttgtag gtagttagt gtagagctc taaagtag cacacccag tctagggt ttagtggct aattctct ttttctt tttttgaga cagagtttt cttctgic ccaggctgga gttcaatgg gcaatctgg ctacctgcaa cctccgcic cgggttcaa gcaattctc tgcctagcc tccagagtag ctgggaatc aggcacagc cacacgccc ggctaatct tttgatt ttgtagaga tgggggttca ccatgttgg caggctggtc tgaactct gacctagg gattcaccca cctggcctc ccaagtgt gggtatag gttgtagcca ccggccccc cctcttct ttttgggg gtaggaalt tgccttgg gtcaggctg gaaatgcat tggctcagc caactccg cttcgtggt caagttagc tctgctca gctcccgag tagctgggat tacaggcag cggcacca cccagctaat ttttatt ttgtagag atgggggttc accatgtgg ccaggctgg ctggaactc cgaactcaag tgaatccac gctcagct cccaaagtgc tgggattaca ggcatggag accgaccca gtaggtgatt ctctgata gaattctg tggtagcagg tgcctccaa cctgaagcta actggcagc cagttagctgg gcttggctc tggggcagg ggacatgggg ccaaggtaggg cctctcc accgtgtagc ccccggagt gctgggtag tgcctgctc cattggccac taccactct tttttaggaa ggtccagcc ccacaggcca cacactcaaa gtagcagtag tggaaaccc taacactgc ctgtggcc tcaagtagat cgtctggaa cacagactta ggcacctgta agaaagcaga gggggccacac tagggggccc aggtcaagg acagctaca tggggaag aaaacagat ctctgcat ctgcccctag ggtcactcc cagggcagggg cccctggctg tgggaactc cggccacagg cactgca	A	Homo sapiens

ජාතිකයෙකු ලෙසින් සිටින බවට පත්වීමට අවස්ථාවක් ලෙසින් සලකා බැලීමට අවස්ථාවක් ලබාදීමට අපි සූදානම්ව සිටිමු. අපගේ අරමුණ වන්නේ, අපගේ ජාතිකයන්ගේ අයිතිවාසිකම් සුරැකිම සහ ඔවුන්ගේ අනාගතය සඳහා සුදුසු පියවර ගැනීමයි. අපගේ අරමුණ වන්නේ, අපගේ ජාතිකයන්ගේ අයිතිවාසිකම් සුරැකිම සහ ඔවුන්ගේ අනාගතය සඳහා සුදුසු පියවර ගැනීමයි. අපගේ අරමුණ වන්නේ, අපගේ ජාතිකයන්ගේ අයිතිවාසිකම් සුරැකිම සහ ඔවුන්ගේ අනාගතය සඳහා සුදුසු පියවර ගැනීමයි.

676	194903	G Protein- Coupled Receptor GPCRB3	LR92	<p> nnnnnnnnnn ccactgctgt aagccacagc gaggcccttaa ggaagtcggc agagagagagtc lalgttcgga ctgcatit  ttcttttt tclgagacag agcttgctc tgcggccag galgagagtc ggggagtcg tctggctca ctgcaaccc tgcctctgg  gttcaagaaa ttctctgcc tcaagctct gaggagtcgg gattacaggt gcttgccacc agcctggct aattttgca tttagcag  agacagggtt taccacgtt gggcaggctg gttccaact cctgacctca tggagtcggc acctagcct cccaaagtc  tgggallaca ggcgtgagcc cccgcccgc gtcggccggcc gggagctgca ttatgagtc gttatctga ctacagtgag  gaaagtgta gaaagaaatt aagactaaa tcaagggggaaa gcttaaggac actgagtgga gaaatagct gagggggagat  gctgggtgta altccagctg tggctgtggc agtggaagag gaggccagaa agggagaaag gggggagagca gggcagggag  gagcagcagat gggcagagat ccaagggtgat gggccatccc tcaacct ccaacagagc attggggccta atacagggag  aaaaagggct ttgtgtgt agggagtgta ggtcaatctg ggccttgctg ggtccagat gggcagat gggccagca  tcaaggggctc agatcagagc ggaaggggagat ggaagtgga ggttaaacca cgaagccaca gcttgctgg gaaclggaaa  agggggagagc aggaaggccga agcctgtccc gggggaalac ctaccttc agaggaagtc gggcaaaagc agagagagc  tgaagtgaa agccagggggc gggcagggggc ctgaggggggc calaatcc aagggaaagc tctatagga ggaactggc  aaaatgtcac aaaggccagc gtcctcatg cctgtaact caccatttg ggaaggccagc gcaagggtgag tgcctgagcc  cagggaagtca agccagct aggcacata gtagagacct tatctaca aaaaalacaa aatagacca ggcaltggc  cacatggctg tggaccagc tactaggag tatgagtgag gaggatgct tgaagctggc agacagtgag acaacattgc  accactgcac tccagccgta ggtcagat gtagctgtgt ctcaaaaaa aaaaaaaa aatatacaaa gtcacctaa  ataaagagag actgcaaat aggtattgta taccagagc gtcggccagc tcaagccgaa agcagagtg gggggagcag  aatggggcag agggctcaatg agggcagggga gaggccagc ggaagctccc atggggagggc gcaaggagtc agtctcagc  gtagagggcc tgggaaggagc agaggaagta gggcaaacac agccagagca ggaagccagc ggggaagagc calaagccaa  gggaaggggc tggccaagc tacaaggcaaa gaaagagcac aggaagagca ctgacatcag caagtgtagc calgacgca  cctctgagcc aggaaggagc aaggaagagc agggcagagca gactggggag agtggggagca gttatggggc tgggaagc  aggggtgct ttttggggc gaggagagc ggggaagag atcactgt caaccagcct ggaagcag ggtgcaatct  cagctcagc caacctcac ctccagat ccaagcaatc tctgtcga gctcccaagc agcggggat tacaaggcaca  caccacact ctacgtaac ttgtatt ttatagaga tgggggttcg ccaactggc cagggtggc tgaactct ggcctcaagc  galtcggcca gctcccca gggatagag gcatagacca cagcggccgt cagagatgct calctaac aagggcaacg  gaacctgg agggagagagc gaaagtgagc gcaagcggc tacaagctag tggcagtagt tcccaaggag aalggttt  cccalgagag tggagcagc galtcggagc cagctctgga aagagagagaa ggtgggggca ggaagccagc tggcagggc  ccctgactt gtagaagc agcagtagcc accaagagaa tcaaggggc aggcagcctt ggggggggaca gcaagctg  cccatagcc cagccagca ctggcctgaa gggagagagc caaaggctg aggtctccagc ttaccatggc caaccggaaa  gggtcagca gggggcgt ggtggcagca cgggtggc tggcagggc aalacatggc agcaccggag gggagagag  gagagggt cctggagct ctatggg tggcct </p>	P	Homo sapiens
				<p> RSCSFNEHY HLFQAMRLGV EEINNSTALL PNITLGYQLY DVCSDSANVY  ATLRVLSLPG QHHIELQGD LHYSPTVLAV IGPDSNTNRAA TTAALLSPFL  VHISYAASSE TSVKQRQYPS FLRTIPNDKY QVETMVL LQ KFGWTWISLV  GSSDDYGQLG VOALENQALV RGICIAFKDI MPFSAQV GDE RMOCLMRHLA  QAGATVVVVF SSRQLARVFF ESVLTLNL TG KVVVASEA WA LSRHITGVPG  IQRIGMVLGV AIQKRAVPGL KAFEEAYARA DKEAPRPCHK GSWCSSNQLC  RECQAFMAHT MPKLKAFMS S AYNAVYAVY AVAHLHQLL GCASELCSRG  RVYPWQ LLEQ IHK VHFLLHK DTVAFNDNRD PLSSYNIAW DWNGPKWTFI </p>		

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QNHGAGLFVM ISSAAQLLIC LTLWVVTPL PAREYQRFPH LVMLECTETN  
SLGFLAFLY NGLLSISAF A CSYLKDLPE NYNEAKCVTF SLLNFVFSWI  
AFFTTASVYD GKYLPAANMM AGLSSLSSGF GGYFPLKCYV ILCRPDLNST  
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hFB41A AX147788 Homo sapiens

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678 194904 WO0034334-  
hFB41A LR114 Homo sapiens

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SRTFFAAKIV IGMALVGIML VCGIGNFIFI AALVRYKKLR NLTNLLIANL AISDFLVAIV  
CCPFEMDYV VRQLSWEHGH VLCTSVNYLR TVSLYVSTNA LLAIAIDRYL  
AIVHPLRPRM KCQTATGLIA LVWTVSILIA IPSAYFTTET VLIVKSQEK IFCGQIWPVD  
QQLYYKSYFL FIFGIEFVGP VVTMTLCYAR ISRELWFAV PGFQTEQIRK  
RLRCRRKTVL VLMCLTAYV LCWAPFYGFT IVRDFFTVF VKEKHLYTAF  
YIVECIAMSN SMINTLCFVT VKNDTVKYFK KIMLLHWKAS YNGGKSSADL  
DLKTIGMPAT EEVDCLRLK

679 194905 G Protein-  
Coupled Receptor  
MGC7035 BC014241 Homo sapiens

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680	194905	G Protein- Coupled Receptor MGC7035	LR112	<p>ccctctgcc ttacgctcc tcagcatcca gtttgcaal gaagtgatga aagcttagag ccagatttta laccitggg ttaaaalact  tgattcccc ttgttgtt lacaaaaa gatgttctt agaaaaatga caaatagtaa aalgaacaaa accctac-gaa agaalgcaa  cagccaggtt ggccggggcc tgcagtggtg cggcgtgtgc tagcaaggcc tgcagggtgt ggcgcagatca ccacaggggt  ctgagaacat ttacagaag tgcctgagac gggagacat ggctgtgtt aaatggagct attcaatagc agtgacgccc  tctctcagc caccaaagt cctgacacc ctcccagcc ccacagata acalcagctg aggtttttt cagtatgaac ctgtcctaaa  tcaattctc aaagtgtga caaactaaa gaataataat aaacaaaaga aaggtgaaaa aaaaaaaa aaaaa</p> <p>MWSCSWFNGT XL VEELXACQ DLQLGLSLLS LLGLVGVVPV GLCYNALLVL  ANLHKSASMT MPDVYFVNMA VAGLVLSALA PVHLLGPPSS RWALWSVGE  VHVALQIPFN VSSLVAMYST ALLSLDHYIE RALPRTYMAS VYNTRHVCGF  VWGGALLTSF SLLFYICSH VSTRALECAK MQNAEADAT LVFIGYVVPV  LATLYALVLL SRVRREDTPL DRDTGRLEPS AHRLLVATVC TQFGLWTPHY  LILLGHTVII SRGKPVDAHY LGLLHFVKDF SKLLAFSSSF VTPLLRYMNM  QSFPSKLQRL MKKLPCGDRH CSPDHMGVQQ VLA</p>	P	Homo sapiens
681	194907	G Protein- Coupled Receptor 14273	LD22826	<p>TCCGGACTAG TTCTAGACCG CTGCGGGCCG CCAGGGCGCCG GGAATGTCCC  CTGAATGCGC GCGGGCAGCG GCGGACGCGC CTTGCGCAG CCTGGAGCAA  GCCAACCGCA CCGGCTTCC CTCTCTCTCC GACGTCAAGG GCGACCCCG  GCTGTGCTG GCCGGGTGG AGACAACCGT GCTGTGTCTC ATCTTTGCAG  TGTCGTGCT GGGCAACGTG TCGCCCTGG TGCTGTGGC GCGCCGACGA  CGCCGGGCG CGACTGCCTG CCTGTACTC AACCTCTCT GCGCGGACCT  GCTCTTCATC AGCGTATCC CTCTGTGTCT GCGCGTGCG TGGACTGAGG  CCTCCCTGCT GGGCCCCGT GCTGCCACC TGCTCTCTA CGTGATGACC  CTGAGCGGCA GCGTACCAT CCTACGCTG GCGCGGTCA GCCTGGAGGG  CATGCTGRGC ATCGRGACC TGGAGCGCGG CGTGGGGGT CCTCCGGCG  GGCGCGGCG AGTGTGCTG GCSTCATCT GGGCTATTC GCGGTGCGC  GCTCTGCTC TGTCGTCTT CTTCGAGTC GTCCCGCAAC GGCTCCCCG  CGCGGACCAG GAAATTCGA TTGCACACT GATTGGCCC AGCATTCCTC  GAGAGATCTC GTGGGATGC TCTTTGTTA CTTTGAACCT CTGTGTGCA  GGACTGGTCA TTGTGATCAG TTACTCCAA ATTTACAGA TCACAAAGGC  ATCAAGGAAG AGGTCACCG TAAGCCTGGC CTACTCGGAG ACCCACAGA  TCCGCGTGTCC CAGCAGGAC TTCCGGCTCT TCCGCAACCT CTTCCTCTC  ATGCTCTCTT TCTTCATCAT GTGGAGCCCC ATCATCATCA CCATCTCTC  CATCTGATC CAGAACTCA AGCAAGACCT GGTCATCTGG CCGTCCCTCT  TCTTCTGGT GTTCCCTTC ACATTTGTA ATTCAGCCCT AAACCCCATC  CTCTACAAAC TGACACTGTG CAGGAATGAG TGAAGAAAA TTTTGTGTG  CTTCTGGTTC CCAGAAAAAG GAGCCATTTT AACGACACA TCTGTCAAAA  GAAATGACTT GTCGATTATT TCTGGCTAAT TTCTTTTATA GCGAGTTTC  TCACACCTGG CGAGCTGTGG CATGCTTTTA AACAGAGTTC ATTTCCAGTA  CCCTCCATCA GTGCACCTG CTTTAAGAAA ATGAACCTAT GCAAATAGAC  ATCCACAGCG TCGGTAATTT AAGGGGTGAT CACCAAGTTT CATAATATTT  TCCCTTTATA AAAGGATTTG TTGGCCAGGT GCAGTGGTTC ATGCCTGTAA</p>	A	Homo sapiens

682	194907	G Protein- Coupled Receptor 14273	LR116	<p>TCCCAGCAGT TTGGGTGAG GTGGGTGGAT CACCTGAGGT CAGGAGTTCG AGACCAACCT GACCAACATG GTGAGACCCC CGTCTCTACT AAAAATAAAA AAAAAATTA GCTGGGAGTG GTGGTGGGA CCTGTAATCC TAGCTACTTG GGAGGCTCAA CCACGAGAA CTCTTGAACC TGGGAGGCAG AGGTTCAGT GAGCCGAGT CGTGCCATTG CACTCCAACC AGGCAACAA GAGTGAACCT CCATCTTAAA AAAAAAATAA AAGATTGT TATGGGTTC TTTAAATGT GAACTTTTT AGTGTGTTG TATATGATCA AATTAATAA ATATTTATTT ATGACTGTTC AGCAAAAAA AAAAAAATAA AGGCGCG MSPECARAAAG DAPLRLEQA NRTRFFFSK VKGDHRL VLA AVETTVLVL FAVSLLGNCV ALVLVARRR RGATACLVN LFCADLLFIS APLVLA VRW TEAWLLGPVA CHLLFYVMTL SGSVTILTLA AVSLDRMVCV VMLQRGVRC GRRARAVLLA LIWGYSAVA LPLCVFFRVV PQRLLPGADQE ISICTLIWPT IPGEISWDVS FVTNLFLVPG LVIVISYSKI LQTTKASRR LTVSLAYSRS HQIRVSQDF RLFRILFLM VSFIMWSP I DITILLIQ NFKQDLVIWP SLPPWVVA PT FANSALNPIL YNMILCRNEW KKFCTWFP EKGAILDTS VKRNDLSIS G ITYSAISDEL RDKVRFPALL RTTPSADHHV EAMVQMLHF RWNWIIVLVS SDTYGRDNGQ LLGERVARRD ICIAFQETLP TLQPNQNMTS EERQRLVTIV DKLQQSTARV VVVFSPDLTL YHFFNEVL RQ NFTGAVVIAS ESWAIDPVLH NLTELGHGTT FLGITIQSV IPGFSEFREW GPQAGPPPLS RTSQSYTCNQ ECDNCLNATL SFNTILRLSG ERVVSYSVA VYVAHALHS LLGCDKSTCT KRVVYPWQLL EEIWKVNFTL LDHQJFFDPQ GDVALHLEIV QWQWDRSQNP FQSVASYPL QRQLKNIKT LHTVNNTPM SMC SKRCQSG QKKKPVGIVH CCFECIDCLP GTFLNHTCP NNEWSYQSET SCFKRQLVFL EWHEAPTIAV ALLAALGFLS TLAILVIFWR HFQTPIVRSA GGPMCFMLT LLLVAYMVVP VYVGPVKVST CLCRQALFPL CFTICISCA VRSFQIVCAF KMASRFP RAY SYWVRYQGPY VSMAFITVLK MVIVVIGMLA RPQSHPRIDP DDPKITIVSC NPYRNLSLF NTSLDL LLSV VGFSFAYMGK ELPTNYNEAK FITLSMTIFYF TSSVSLCTFM SAYSGVLVTI VDLLVTVLNL LAISLGYFGP KCYMILFYPE RNTPAYFN SM IQGYTMRRD</p>	P	Homo sapiens
683	194908	G Protein-coupled Receptor Gpcrb4	LR117	<p>alagacagca attcatcct gctggggct ggcagctgt gctacgcgaa cglgaalggg tctgtgtga aaatccctt ctgcgcggga tccgggga tctgtacat agtgttggc ttggggctg tgcgtgcgtgt gtttggaac ctcctggga tgaattcaat ctccattc aagcagctgc actctccag caatttctc gtgcctctc tggcctgctc tggcctgctc tggcctgctc tggcctgctc tggcctgctc ctcagcatg gtcaggacgg tggagagctg ctggaattt gggagaggtt ttgtactt ccacactgc tggcctgctc tggcctgctc tggcctgctc ctcttctc ttactgt gctcctc catcgacagg tacatggcg ttactgaccc cctgtctat cctacaaagt tcccgtaic tgtgtcagga attgtcaltca gctgtctctg gatctgccc ctaltgaca ggggtgctgt gtttacaaca ggtgtctatg acgatggct ggaggaatla tctgtgccc laactgtat aggggtgtgt cagaccgttg taatcaaaa ctgggtgtg acagatttc tatctctt talacclacc ttattatga taattctgta tggtaacata ttctgttgg ctgacgaca ggcgaaaaag atagaaaaa ctggtagcaa gacagaalca tctcagaga gttacaagc cagagtgcc agagagagga gaagaagcagc taataccctg ggggtcacag tggtagcatl tatgattca tgggtacat atagcatga ttcatatgt gatgcttta tggccttata aaccctgccc tgaattatg agattgtctg ttgggtgct taitataact cagccatgaa tctttgatt tatgctttat ttaccatg gtttaggaaa gcaataaag</p>	P	Homo sapiens
684	194957	Trace Amine Receptor 4 (TA4)	AF380192		A	Homo sapiens

685	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	<p>ttattgaac tggcagggt taaagaaca gttcagaac calgaatttg ttttcgaac atalataa</p> <p>MSSNSSLLVA VOLCYANVNG SCVKIPSPG SRVIL YIVFG FGA VLA VFGN</p> <p>LLVMISILHF KQLHSPTNFL VASLACADFL VGVTVMPFSM VRTVESCWYF</p> <p>GRSCTFHTC CDVAFCYSSL FHLCFISDR YIAVTDPLVY PTKFTVSVSG ICISVSWILP</p> <p>LMYSGAVFYT GYVDDGLEEL SDALNCIGGC QTVVNQNWVL TDFLSFFIPT</p> <p>FIMILYGNL FLVARRQAKK IENTGSKTES SSESYPKARVA RRERKAAKTL</p> <p>GVTVAFMIS WLPYSIDSLI DAFMGFTIPA CIYEICCWCA YNSAMNPLI</p> <p>YALFYPWFRK AIKVITGQV LKNSSATMNL FSEHI</p> <p>atgacagca attttccca accgtgtg cagcttgt atgaggatg gaalgatc tgaatgaaa ctoctattc tccgggtcc</p> <p>cgggtaattc tgcacggcg gtttagctt cggctttgc tggctgatt tggaaatc tgaatgaa cttctgtct tcatitaaag</p> <p>cagctgcact cccaacca ttttcaat gccctcagg ccgtgtcga cttctgtga ggtgtgacg tgaatctt cagcaggc</p> <p>aggacggagg agagctgcg gtaattgga gccaaattt gtaactica cagttgtgt gatgggcat ttgttactic ttctgtcic</p> <p>cacttgtct tcalgtcat cgacaggagc attgttgta cgaacccct ggctatgct accaagtica ccgtgtcgt gtcgggaatt</p> <p>tgcacagcg tgcctggat tgcctcic acgtacagcg gtcgtgtt ciacacaggi gcaalgatg atgggctgga</p> <p>ggaaatgaa agtgcctca acgtgtagg tggctgtcaa ataatgaa gcaaggctg ggtgtgata gatttttgt tattctcat</p> <p>acctacccti gtaatgaa ttcttiacag taagatttt ctatagcta aacaacaagc tataaaat gaaaciacta gtagcaagt</p> <p>agaatcacc tcaagagat alaaaacag agtggccaag agagagaggga aagcagctaa aacctggggg gtcacggtag</p> <p>tagcattgt tattcatgg ttaccgtata cagtigatal ataatgat gccattagg gcttcctgac ccctgcat alctatgaaa</p> <p>tttgcgttg gagtgctat talaacacag ccatgaatc ttgatttat gctctattt alccctgtt taggaaagcc ataaaacta</p> <p>tttaaggg agatgtta aaggctgt catcaacct tagttatt tgaataa</p> <p>MTSNFSQPVV QLCYEDVNGS CIETPSPGS RVILYTAFSF GSLLA VFGNL</p> <p>LVMTSVLHFK QLHSPTNFLI ASLACADFLV GVTVMFLSMV RTVESCWYFG</p> <p>AKFCTLHSCC DVAFCYSSVL HLCFICIDRY IVVTDPLVYA TKFTVSVSGI CISVSWILPL</p> <p>TYSGAVFYTG VNDDGLEELV SALNCVGGCQ IIVSQGWVLI DFLFFIPTL VMILYSKIF</p> <p>LIAKQQAUKI ETTSSKVESS SESYKIRVAK RERKAAKTLG VTVLAFVISW LPYTVTDILID</p> <p>AFMGFLTPAY IYEICCWSA YNSAMNPLIY ALFYPWFRKA IKLLSGDVL</p> <p>KASSTISLF LE</p>	P	Homo sapiens
686	194958	Trace Amine Receptor 5 (TA5)	AF380193	<p>atgacagca attttccca accgtgtg cagcttgt atgaggatg gaalgatc tgaatgaaa ctoctattc tccgggtcc</p> <p>cgggtaattc tgcacggcg gtttagctt cggctttgc tggctgatt tggaaatc tgaatgaa cttctgtct tcatitaaag</p> <p>cagctgcact cccaacca ttttcaat gccctcagg ccgtgtcga cttctgtga ggtgtgacg tgaatctt cagcaggc</p> <p>aggacggagg agagctgcg gtaattgga gccaaattt gtaactica cagttgtgt gatgggcat ttgttactic ttctgtcic</p> <p>cacttgtct tcalgtcat cgacaggagc attgttgta cgaacccct ggctatgct accaagtica ccgtgtcgt gtcgggaatt</p> <p>tgcacagcg tgcctggat tgcctcic acgtacagcg gtcgtgtt ciacacaggi gcaalgatg atgggctgga</p> <p>ggaaatgaa agtgcctca acgtgtagg tggctgtcaa ataatgaa gcaaggctg ggtgtgata gatttttgt tattctcat</p> <p>acctacccti gtaatgaa ttcttiacag taagatttt ctatagcta aacaacaagc tataaaat gaaaciacta gtagcaagt</p> <p>agaatcacc tcaagagat alaaaacag agtggccaag agagagaggga aagcagctaa aacctggggg gtcacggtag</p> <p>tagcattgt tattcatgg ttaccgtata cagtigatal ataatgat gccattagg gcttcctgac ccctgcat alctatgaaa</p> <p>tttgcgttg gagtgctat talaacacag ccatgaatc ttgatttat gctctattt alccctgtt taggaaagcc ataaaacta</p> <p>tttaaggg agatgtta aaggctgt catcaacct tagttatt tgaataa</p> <p>MTSNFSQPVV QLCYEDVNGS CIETPSPGS RVILYTAFSF GSLLA VFGNL</p> <p>LVMTSVLHFK QLHSPTNFLI ASLACADFLV GVTVMFLSMV RTVESCWYFG</p> <p>AKFCTLHSCC DVAFCYSSVL HLCFICIDRY IVVTDPLVYA TKFTVSVSGI CISVSWILPL</p> <p>TYSGAVFYTG VNDDGLEELV SALNCVGGCQ IIVSQGWVLI DFLFFIPTL VMILYSKIF</p> <p>LIAKQQAUKI ETTSSKVESS SESYKIRVAK RERKAAKTLG VTVLAFVISW LPYTVTDILID</p> <p>AFMGFLTPAY IYEICCWSA YNSAMNPLIY ALFYPWFRKA IKLLSGDVL</p> <p>KASSTISLF LE</p>	A	Homo sapiens
687	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	<p>ttattgaac tggcagggt taaagaaca gttcagaac calgaatttg ttttcgaac atalataa</p> <p>MSSNSSLLVA VOLCYANVNG SCVKIPSPG SRVIL YIVFG FGA VLA VFGN</p> <p>LLVMISILHF KQLHSPTNFL VASLACADFL VGVTVMPFSM VRTVESCWYF</p> <p>GRSCTFHTC CDVAFCYSSL FHLCFISDR YIAVTDPLVY PTKFTVSVSG ICISVSWILP</p> <p>LMYSGAVFYT GYVDDGLEEL SDALNCIGGC QTVVNQNWVL TDFLSFFIPT</p> <p>FIMILYGNL FLVARRQAKK IENTGSKTES SSESYPKARVA RRERKAAKTL</p> <p>GVTVAFMIS WLPYSIDSLI DAFMGFTIPA CIYEICCWCA YNSAMNPLI</p> <p>YALFYPWFRK AIKVITGQV LKNSSATMNL FSEHI</p> <p>atgacagca attttccca accgtgtg cagcttgt atgaggatg gaalgatc tgaatgaaa ctoctattc tccgggtcc</p> <p>cgggtaattc tgcacggcg gtttagctt cggctttgc tggctgatt tggaaatc tgaatgaa cttctgtct tcatitaaag</p> <p>cagctgcact cccaacca ttttcaat gccctcagg ccgtgtcga cttctgtga ggtgtgacg tgaatctt cagcaggc</p> <p>aggacggagg agagctgcg gtaattgga gccaaattt gtaactica cagttgtgt gatgggcat ttgttactic ttctgtcic</p> <p>cacttgtct tcalgtcat cgacaggagc attgttgta cgaacccct ggctatgct accaagtica ccgtgtcgt gtcgggaatt</p> <p>tgcacagcg tgcctggat tgcctcic acgtacagcg gtcgtgtt ciacacaggi gcaalgatg atgggctgga</p> <p>ggaaatgaa agtgcctca acgtgtagg tggctgtcaa ataatgaa gcaaggctg ggtgtgata gatttttgt tattctcat</p> <p>acctacccti gtaatgaa ttcttiacag taagatttt ctatagcta aacaacaagc tataaaat gaaaciacta gtagcaagt</p> <p>agaatcacc tcaagagat alaaaacag agtggccaag agagagaggga aagcagctaa aacctggggg gtcacggtag</p> <p>tagcattgt tattcatgg ttaccgtata cagtigatal ataatgat gccattagg gcttcctgac ccctgcat alctatgaaa</p> <p>tttgcgttg gagtgctat talaacacag ccatgaatc ttgatttat gctctattt alccctgtt taggaaagcc ataaaacta</p> <p>tttaaggg agatgtta aaggctgt catcaacct tagttatt tgaataa</p> <p>MTSNFSQPVV QLCYEDVNGS CIETPSPGS RVILYTAFSF GSLLA VFGNL</p> <p>LVMTSVLHFK QLHSPTNFLI ASLACADFLV GVTVMFLSMV RTVESCWYFG</p> <p>AKFCTLHSCC DVAFCYSSVL HLCFICIDRY IVVTDPLVYA TKFTVSVSGI CISVSWILPL</p> <p>TYSGAVFYTG VNDDGLEELV SALNCVGGCQ IIVSQGWVLI DFLFFIPTL VMILYSKIF</p> <p>LIAKQQAUKI ETTSSKVESS SESYKIRVAK RERKAAKTLG VTVLAFVISW LPYTVTDILID</p> <p>AFMGFLTPAY IYEICCWSA YNSAMNPLIY ALFYPWFRKA IKLLSGDVL</p> <p>KASSTISLF LE</p>	P	Homo sapiens
688	194989	MrgX4 G Protein-Coupled Receptor	AY042216	<p>ttattgaac tggcagggt taaagaaca gttcagaac calgaatttg ttttcgaac atalataa</p> <p>MSSNSSLLVA VOLCYANVNG SCVKIPSPG SRVIL YIVFG FGA VLA VFGN</p> <p>LLVMISILHF KQLHSPTNFL VASLACADFL VGVTVMPFSM VRTVESCWYF</p> <p>GRSCTFHTC CDVAFCYSSL FHLCFISDR YIAVTDPLVY PTKFTVSVSG ICISVSWILP</p> <p>LMYSGAVFYT GYVDDGLEEL SDALNCIGGC QTVVNQNWVL TDFLSFFIPT</p> <p>FIMILYGNL FLVARRQAKK IENTGSKTES SSESYPKARVA RRERKAAKTL</p> <p>GVTVAFMIS WLPYSIDSLI DAFMGFTIPA CIYEICCWCA YNSAMNPLI</p> <p>YALFYPWFRK AIKVITGQV LKNSSATMNL FSEHI</p> <p>atgacagca attttccca accgtgtg cagcttgt atgaggatg gaalgatc tgaatgaaa ctoctattc tccgggtcc</p> <p>cgggtaattc tgcacggcg gtttagctt cggctttgc tggctgatt tggaaatc tgaatgaa cttctgtct tcatitaaag</p> <p>cagctgcact cccaacca ttttcaat gccctcagg ccgtgtcga cttctgtga ggtgtgacg tgaatctt cagcaggc</p> <p>aggacggagg agagctgcg gtaattgga gccaaattt gtaactica cagttgtgt gatgggcat ttgttactic ttctgtcic</p> <p>cacttgtct tcalgtcat cgacaggagc attgttgta cgaacccct ggctatgct accaagtica ccgtgtcgt gtcgggaatt</p> <p>tgcacagcg tgcctggat tgcctcic acgtacagcg gtcgtgtt ciacacaggi gcaalgatg atgggctgga</p> <p>ggaaatgaa agtgcctca acgtgtagg tggctgtcaa ataatgaa gcaaggctg ggtgtgata gatttttgt tattctcat</p> <p>acctacccti gtaatgaa ttcttiacag taagatttt ctatagcta aacaacaagc tataaaat gaaaciacta gtagcaagt</p> <p>agaatcacc tcaagagat alaaaacag agtggccaag agagagaggga aagcagctaa aacctggggg gtcacggtag</p> <p>tagcattgt tattcatgg ttaccgtata cagtigatal ataatgat gccattagg gcttcctgac ccctgcat alctatgaaa</p> <p>tttgcgttg gagtgctat talaacacag ccatgaatc ttgatttat gctctattt alccctgtt taggaaagcc ataaaacta</p> <p>tttaaggg agatgtta aaggctgt catcaacct tagttatt tgaataa</p> <p>MTSNFSQPVV QLCYEDVNGS CIETPSPGS RVILYTAFSF GSLLA VFGNL</p> <p>LVMTSVLHFK QLHSPTNFLI ASLACADFLV GVTVMFLSMV RTVESCWYFG</p> <p>AKFCTLHSCC DVAFCYSSVL HLCFICIDRY IVVTDPLVYA TKFTVSVSGI CISVSWILPL</p> <p>TYSGAVFYTG VNDDGLEELV SALNCVGGCQ IIVSQGWVLI DFLFFIPTL VMILYSKIF</p> <p>LIAKQQAUKI ETTSSKVESS SESYKIRVAK RERKAAKTLG VTVLAFVISW LPYTVTDILID</p> <p>AFMGFLTPAY IYEICCWSA YNSAMNPLIY ALFYPWFRKA IKLLSGDVL</p> <p>KASSTISLF LE</p>	A	Homo sapiens

689	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	MDPTVPVFGT KLTPINGREE TPCYNQTLSTF TVLTCTISLV GLTGNAVVLW LLGYRMRRNA VSYILNLAA ADFLFLSFQI IRSPLRLINI SHLRKILVS VMTPFYFTGL SMLSIASTER CLSVLWPIWY RCRPRTHLSA VVCVLLWGLS LLFSMLEWRF CDFLFGADS SWCETSDFIP VAWLFLCVV LCVSSLVLLV RILCGSRKMP LTRL YVTILL TVLVFLLCGL PFGILGALY RMHLNLEVLV CHVYLVCMSL SSLNSSANPI IYFFVGSFRQ RQNRQNLKLV LQRALQDKPE VDKGEGQLPE ESLELSGSRL GP	P	Homo sapiens
690	195015	G Protein- Coupled Receptor GPR82	AF411111	atgaacaaca atacaacalg tattcaacca tctatgatct ctccatggc tttaaccaalc atttaccatcc tccittglat tgttggigt tttggaaaca cctctctca atggatatt ttacaacaaa taggiaaaaa aacalcaacg cacalctacc tgcacacct tgtgacigca aacttacttg tggcagcgc calgccttc atggatctat atttcigaa aggtttccaa tgggaataic aatcigctca atgcagagig gtcaatttic tgggaactct atccatgcat gcaagialgt tgcagict cttaattta agtttgatig ccalaagccg clalgclacc ttaaigcaaa aggatccctc gcaagagact acttcatgct atgagaacaa atttatggc catttactga aaaaatticg ccagcccaac tttgctagaa aactatgcat ttacatagg ggagtgtgac tgggcataat cattccaggt accgtatata actcagctat agaggcttaca gaaaggagaag agagccatg ctacaatcg cagalggaaac tagggagccat gatctctcag atttcagggc tcatigggaac cacatttatt ggattttct tttatglat actaacatca tactactct tttgaagca tctgagaaaa ataaagaact gtagtccat taiggagaaa gatttgactt acagtctctg gaaaagacat cttttggca tccagattct actaatatt aatagaaca aaaaacalc taccigtct ttttaaacc attttatg ttctacaca aagagataac tgcagcaat tgaattatt aatagaaca aaaaacalc taccigtct tgcctggcc agaagtagca cagacccat tatattct ttatagaca aaacattcaa gaagacacta tataatctct ttacaagtc taattcagca cataatgcat cataatggttg a	A	Homo sapiens
691	195015	G Protein- Coupled Receptor GPR82	AAL26482	MNNNTTCIQP SMSSMALPI IYLLCIVGV FGNTLSQWIF LTKIGKKTST HIYLSHLVTA NLLVCSAMPF MSYFLKGFQ WEYQSAQCRV VNFLGTLSMH ASMFVSLIL SWIAISRYAT LMQKDSQET TSCYEKIFYG HLLKKFRQPN FARKLCIYW GVVLGIHPV TVYYSVIEAT EGEESLCYNR QMELGAMISQ IAGLIGTTFI GFSFLVVLTS YYSFVSHLRK IRTCTSIMEK DLTYSVVKRH LLVIOILLIV CFLPYSIFKP IFYVVLHQRDN CQQLNYLIET KNILTCLASA RSSTDPIFL LLDKTFKKTL YNLFTKSNSA HMOSYG	P	Homo sapiens

SEQ ID	LSID	Gene	Source ID	Sequence	Code	Species
NO:					Name	
1	127	5-HT1A Receptor	NM_000524	atggatgtgc tcagccctgg tcagggcaac aacaccacat caccaccggc tccctttgag A accggcgga acactactgg tatctccgac gtgaccgtca gctaccaagt gatacctct ctgctgtgg gcacgtcat ctctgctgag gtgctggga atgctgctg ggtggtgccc atcgccctgg agcgtccct gcagaacgtg gccaatatc ttattggctc ttggcggtc accgacctca tgggtgcggt gttgtgtgctg cccatggcg cgctgtatca ggtgetcaac aagtggacac tgggccaggt aacctgcgac ctgttcacg cctcgacgt gctgtgctgc acctatcca tcttgacact gtgcgccatc gcgctggaca ggtactgggc catacggac ccatcgact acgtgaacaa gaggacgcc cggccgctg cgtcatctc gctacttgg cttatgggt tctcatctc tatccgccc atcctgggt ggcacccc ggaagaccgc tcggacccc acgcatgcac cattagcaag gctgtctatg atggcgcat attccgagct ggagctttct acatccgct gctgctcatg ctggttctct atggcgcat attccgagct gcgccttcc gcaccgcaa gacgttcaaa aaggtggaga agaccggagc ggacaccgc catgagcat ctccgccc gcagcccaa agagtgtga atggagagtc gggagcagg aactggaggc tggcggtgga gagcaaggct ggggtgctc tgtgcgcaa tggcgcggtg aggcaaggtg acgatggcg cgcctggag gtgactgagg tgcaccgagt ggcaactcc aaagagcact tgcctctgcc cagcaggct ggtcctacc cttgtgccc cgcctcttc gagaggaaa atgagcgcaa cgccgaggc aagcgcaaga tggccctggc ccgagagagg aagacagtga agacgtggg catcatcatg ggcacctca tctctgctg gctgcccctc ttcatcgtgg ctctgttct gccttctgc gagagcagct gccacatgcc caccctgttg ggcgccataa tcaattggct gggctactcc aactctctg ttaacccgt catttaagca tacttcaaca aggactttca aaacgcgtt aagaagatca ttaagtgtaa cttctgccc cagta	A	Homo sapiens
2	127	5-HT1A Receptor	NP_000515.1	MDVSPGGN NTTSPAPFE TGNNTGISD VTVSYQVITS LLLGTLIFCA VLGNA CVVAA P IALERSIQNV ANYLIGSLAV TDLMSVLVL PMAALYQVLN KWTLGQVTC LFIALDVLCC TSSILHLCAI ALDRYWAITD PIDYVNRTP RPRALISLTW LIGFLISIPP ILGWRFPEDR SDPDATISK DHGYTIYSTF GAFYIPLLLM LVLYGRIFRA ARFRIRKTVK KVEKTGADTR HGASPAPOPK KSVNGESGR NWRLGVESKA GGALCANGAV RQDDGGALE VIEVHRVGN KEHLPLPSEA GPTPCAPASF ERKNERNAEA KRKMALARER KTVKTLGIIM GTFILCWLPF FIVALVL PFC ESSCHMPTLL GAINWLGYNS NSLLNPVIYA YFNKDFQNAF KKIHKCNFCR Q	P	Homo sapiens
3	128	5-HT1B Receptor	NM_000863	atggaggaaac cgggtgctca gtgcgctcca ccgcgcgcgc cgggctccga gacctgggtt A cctcaagcca acttatctc tgcctccctc caaaactgca gcgccaagga ctacatttac caggactcca tctccctacc ctggaaagta ctgctggtta tgctattggc gctcatcacc ttggccacca cgctctccaa tgccttctg attgccacag tgtaccggac ccggaactg cacacccgg ctaactacct gatgcctct ctggcggtca ccgacctgct tgtgtccatc ctggtgatgc ccatcagcac catgtacact gtcaccggcc gctggacact gggccagggtg gtctgtgact tctggctgtc gtcggacatc acttgttgca ctgcctccat cctgcacctc tgtgtcatcg ccctggaccg ctactggcc atcacggacg ccgtggagta ctcagctaaa aggactccca agagggcggc ggtcatgac gcgctgggtt gggcttctc catctctatc	A	Homo sapiens

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4	128	5-HT1B Receptor	NP_000854.1	<p>tcgctgccgc cctttctctg gcgtcaggct aaggccgaag aggaggtgtc ggaatgcgtg  gtgaacaccc accacatcct ctacacggtc tactccacgg tgggtgcttt ctactcccc  accctgctcc tcatcgccct ctatggcgc atctacgtag aagcccgctc ccggtatttg  aaacagacgc ccaacaggac cggcaagcgc ttgacccgag ccagctgat aaccgactcc  ccgggtcca cgtcctcggc cacctctatt aactcgcggg ttcccgacgt gccagcgaa  tcgggatcct ctgtgtatgt gaaccaagtc aaagtgcgag ttcccgacgc cctgctggaa  aagaagaaac tcatggccgc tagggagcgc aaagccacca agaccctagg gatcattttg  ggagccttta ttgtgtgttg gctacccttc ttcatcatct cctagtgtat gcctatctgc  aaagatgcct gctggttcca cctagccatc ttgacttct tcaatggct gggctatctc  aactccctca tcaaccccat aatctatacc atgtccaatg aggactttaa acaagcattc  cataaactga tacgttttaa gtgcacaagt tga</p>	Homo sapiens
5	129	5-HT1D Receptor	NM_000864	<p>agccaaatgt gtggaggtct gtgggaagag agagccacct agcatgtccc cactgaacca A  gtcagcagaa ggccttcccc aggagcctc caacagatcc ctgaatgcca cagaaacctc  agagccttg gatccagga cctccaggc gctcaagatc tccctggccg tggctccttc  cgtcatcaca ctggccacag tccctccaa tcccttgta ctcaecacca tcttactcac  caggaagctc cacacccctg ccaactacct gattggctcc ctggccacca ccgacctctt  ggttccatc ttggtaatgc ccacagcat gcctatacc atcaccaca cctggaaactt  tgccaaaac ttgtgtgaca tctggctgtc ctctgacatc acgtgtgca cagcctccat  cctgcatact tgtgtcattg ctctggacag gtactgggca atcacagatg ccctgggaata  cagtaaacgc aggaaggctg gccacgggc caccatgatc gccattgtct gggccatctc  catctgcac tccatcccc cgtctctctg gcggcaggcc aaggccagg aggagatgtc  ggactgtctg gtgaacacct ctacagatctc ctacaccatc tactccacct gtggggcctt  ctacattccc tcgggtgtgc tcatactct atatggccgg atctaccggg ctgcccggaa  ccgcatactg aatccacct cactctatgg gaagcgttc accacggccc acctcatcac  aggctctgcc gggctctcgc tctgctcgtc caactccagc ctccatgagg ggcactcgca  ctcggtggc tccctctctt ttttcaacca cgtgaaaatc aagcttgctg acagtgcctt  ggaacgcaag aggtattctg ctgctcgaga aaggaaagcc actaaaatcc tgggcatacat  tctgggggccc ttatcatct gctggctgccc ctctctctg gtgtctctgg tccctcccat  ctgcccggac tctgctgga tccacccggc gctctttgac tcttccacct ggtaggcta  tttaaaactc ctcatcaatc caataatcta cactgtgttt aatgaagatg ttcggcaagc  ttttcagaaa atgttccctt tccggaaggc ctctagtct tattcgatga ggtaaaagaa  MSPLNQSAEG LPQEAENRSL NATETSEAWD PRTIQALKIS LAVVLSVITL ATVLSNAFVL P  TTILLTRKLH TPANYLIGSL ATTDLLVSIL VMPISIAITI THWNFGQIL CDIWLSSDIT  CCTASILHLC VIALDRYWA TDALEYSKRR TAGHAATMIA IVWAISICIS IPPLFWRQAK</p>	Homo sapiens
6	129	5-HT1D Receptor	NP_000855.1	<p>MSPLNQSAEG LPQEAENRSL NATETSEAWD PRTIQALKIS LAVVLSVITL ATVLSNAFVL P  TTILLTRKLH TPANYLIGSL ATTDLLVSIL VMPISIAITI THWNFGQIL CDIWLSSDIT  CCTASILHLC VIALDRYWA TDALEYSKRR TAGHAATMIA IVWAISICIS IPPLFWRQAK</p>	Homo sapiens

7	130	5-HT1E Receptor	NM_000865	<p>atcgaatggt gagagaagca gtgctctgat ccagctcagg agaaaaagga gcgggttccg A agtgagactt ctggagccag ctggacgtgc cggtttgccc agtgcggcgc gctgcacgc accgtccaca agagtctcag tcgcccaggc tggagtgca cagcacagtc tcacctcatt gcaacctcgc cctcccgggt tcgcgggttc tccgcctcag ctctcctagta gctgggattg caggcaactca ccaccatgcc cggctaattt ttggaattt tagtgagac gggatttcac catgttgcc atgctggtct tgaacccccg acctcggatg attcgccgc ctcggcctcc caaagtgtg gaattacagg cgaaccttca ctcaagaaga atgctgtggc cttcccttt accaacagaa aatggaacac aagagaccac atagctgaac aaattatagc ctcttaca gtgagaaacc ttcgaggcta catagttttc agccaaagga aaataaccaa cagcttctcc acagtgtaga ctgaacaag ggaacatga acatcacaaa ctgtaccaca gaggccagca tggctataag acccaagacc atcactgaga agatgctcat ttgcatgact ctggtgtgca tcaccacct caccacgttg ctgaacttg gtgtgatcat ggcattggc accaccaaga agctccaca gctgccaac tacctaact gtctctggc cgtgacggac ctctgtgtg cagtgtcgt catgcccctg agcatcatct acattgtcat ggatcgttg aagcttgggt acttctctg tgaggtgtg ctgagtggtg acatgacctg ctgacactgc tccatctcc acctctgtg cattgccctg gacaggtact gggccatcac caatgctatt gaatacgca ggaagaggac ggccaagagg gccgcgtga tgatccttac cgtctggacc atctccatt tcatctccat gcccctctg ttctggagaa gccacggcc cctaagcct cccctagtc agtgaccat ccagcacgac catgttatct acaccattta ctccacgtg ggtgcgttt atatccctt gactttgata ctgattctct attaccggt ttaccacgc gccaaagatt tttaccagaa aggggatca agtcggcact taagcaacag aagcacagat agccagaatt cttttgcaag ttgtaactt acacagactt tctgtgtgc tgacttctcc acctcagacc ctaccacaga gtttgaag ttccatgcct ccatcaggat cccccctt gacaatgatc tagatcaccc aggagaact cagcagatct ctgacaccag ggaacggaag gcagcacgca tcctggggct gattctgggt gcattcattt tatcctggct gccattttc atcaaagagt tgattgtggg tctgagcatc tacaccgtgt cctcggaagt ggcgacttt ctgacgtggc tcggttatgt gaattctctg atcaacctc tgctctatc gagttttaa gaagacttta agctggcttt taaaaagctc attagatgcc gagagcatac ttagactgta aaagctaaa aggcacgact ttttccagag cctcatgagt ggaagggggt aaggggtgca acttattaat tcttgaacat acttggttca ggagagtttg taagtatgtg tggtcttgtt tcctgttgtg ttgttttgtt ttgtcttgtt ttgttgagg attgttattt ggcgtgctgt ttctacctc tggtcttacc tgtgatacat aatttcaaat aaacattatc atacaaaaa aaaaaaaaa aaaaaaaa</p>	<p>Homo sapiens</p>
8	130	5-HT1E Receptor	NP_000856.1	<p>MNITNCTTEA SMAIRPKTIT EKMLICMTLV VITTLTLLN LAVIMAIGTT KKLHQPNYL P ICSLAVTDLL VAVLVMPLSI IYIVMDRWKL GYFLCEVWLS VDMTCCTCSI LHLCVIALDR YWAITNAIEY ARKRTAKRAA LMILTVWTIS IFISMPPLFW RSHRLSPPP SQCTIQHDHV IYTIYSTLGA FYIPLTLILI LYRIYHAAK SLYQKRGSSR HLSNRSTDQS NSFASCKLTQ</p>	<p>Homo sapiens</p>

9	131	5-HT1F Receptor	NM_000866	<p>TFCVSDFTS DPTTEFEK FH ASIRIPPF DN DLDHPGERQQ ISSTRERKAA RILGLILGAF ILSWLPFFIK ELIVGLSIYT VSSEVADFLT WLGYVNSLIN PLLYTSFNED FKLAFFKLIR CREHT</p> <p>atggatttct taaattcatc tgatcaaaac ttgacctcag aggaactgtt aaacagaatg A ccatccaaaa ttctgggtgc cctcactctg tctgggctgg cactgatgac aacaactatc aactcccttg tgatcgctgc aattattgtg acccggaagc tgaccatcc agccaattat ttaatttgtt ccttgagcgt cacagatttt cttgtggctg tctgtgtgat gcccttcagc attgtgtata ttgtgagaga gagctgatt atggggcaag tggctctgtga catttggtg agtgttgaca ttactgtcg cactgtctc atctgtcatc tctcagctat agctttggat cggatcgag caatcacaga tgcgtgtgag tatgccaga aaaggactcc aaagcatgct ggcattatga ttacaatagt ttggattata tctgttttta tctctatgcc tctctattc tggaggcacc aaggaaactag cagagatgat gaatgcatca tcaagcacga ccacattgtt tccaccattt actcaacatt tggagcttcc tacatcccac tggcattgat ttgatcctt tactacaaaa tatatagagc agcaagagaca ttataccaca agagacaagc aagtaggatt gcaaggagg aggtgaatgg ccaagtctt ttggagagtg gtgagaaaaag cactaaatca gtttccacat cctatgtact agaaaagctc ttatctgacc catcaacaga ctttgataaa attcatagca cagtgaaga tctcagctc gaattcaagc atgagaaatc ttggagaaag caaaagatct caggtacaag agaagcgaag gcagccacta ccttgggatt aatcttgggt gcatttggtaa tatgttggct tctttttttt gtaaaagaat tagttgttaa tgcctgtgac aaatgtaaaa ttctggaaga aatgtccaat tttttggcat ggcttgggta tctcaattcc cttataaaatc cactgattta cacaatctt aatgaagact tcaagaaagc attccaaaag cttgtgcgat gtcgatgtta g</p>	Homo sapiens
10	131	5-HT1F Receptor	NP_000857.1	<p>MDFLNSSDQN LTSEELNRM PSKILVSLTL SGLALMTTI NSLVIAAIIV TRKLHPANY P LICSLAVTDF LVAVLMPFS IVYIVRESWI MGQVVCIDIWL SVDITCCTCS ILHLSAIALD RYRAITDAVE YARKRTPKHA GIMITIVWII SVFISMPPLF WRHQGTSRDD ECIKHDHIV STIYSTFGAF YIPLALIL YKYIYRAKT LYHKRQASRI AKEEVNGQVL LESEKSTKS VSTSIVLEKS LSDPSTDFDK IHSTVRSIRS EFKHEKSWRR QKISGTRERK AATTLGLILG AFVICWLPFF VKELVNVCD KCKISEMSN FLAWLGYLNS LINPLIYTIF NEDEKKAFOK LVRRC</p>	Homo sapiens
11	132	5-HT2A Receptor	NM_000621	<p>gaattcgggt gagccagctc cgggagaaca gcatgtacac cagcctcagt gttacagagt A gtgggtacat caaggtgaat ggtgagcaga aactataacc tgttagtctt tctacacctc atctgctaca agttctggct tagacatgga tattctttgt gaagaaaaata cttctttgag ctcaactacg aactccctaa tgcaattaaa tgatgacacc aggtcttaca gtaatgactt taactctgga gaagctaaca cttctgatgc atttaactgg acagtcgact ctgaaaaatcg aaccacactt tctgtgaaag ggtgcctctc accgtcgtgt cctcctctac ttcactctca ggaaaaaaac tggctctgctt tactgacagc cgtagtgtatt attctaacta ttgctgga catactcgtc atcatggcag tgtccctaga gaaaaagctg cagaatgcca ccaactattt cctgatgtca cttgccatag ctgatatgct gctgggtttc cttgtcatgc ccgtgtccat gttaaccatc ctgtatgggt accggtggcc tctgcgagc aagctttgtg cagctggat ttacctggac gtgctcttct ccacggcctc catcatgcac ctctgcgcca tctcgtgga ccgctacgtc gccatccaga atcccatcca ccacagccgc ttcaactcca gaactaaggc</p>	Homo sapiens



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 aggtgcagt gagcgaagt cacaccactg ccatttctc ctgggcaaca gagtgaagcc  
 ctatcacccc gaattc

12 NP\_000612.1 MDILCENTS LSSTNSLMQ LNDDRLYSN DENSGEANTS DAFNWTVDSE NRTNLSCEGC P Homo  
 132 5-HT2A Receptor LSPSCLSLH LQKNWSALL TAVVILTIA GNILVIMAVS LEKKLQNATN YFILMSLAID sapiens

13	133	5-HT2B Receptor	NM_000867	<p>MLLGLFVMPV SMLTILYGYR WPLPSKLCV WYLDVLFST ASIMHLCAIS LDRYVAIQNP  IHHSRFSNRT KAFLEKIIAW TISVGISMPI PVFGLQDDSK VFKEGSCLLA DDNFVLIGSF  VSFFIPLTIM VITYFLTIKS LQKEATLCVS DLGTRAKLAS FSELPQSSLS SEKLFQRSIH  REPGSYTGRR TMSISNEQK ACKVLGIVFF LFVVMWCPFF ITNINAVICK ESCNEDVIGA  LLNVFWIGY LSSAVNPLVY TLENKTYRSA FSRYIQCYK ENKKPLQLIL VNTIPALAYK  SSQLQMGQKK NSKQDAKTTD NDCSMVALGK QHSEEAASKDN SDGVNEKRVSC V  tactaaccat gctgaccact gttcgggaac ggattgaatc acagaaaaac agcaaatggc A  tctctcttac agagtgtctg aacttcaaag cacaattcct gagcacattt tgcagagcac  ctttgttcac gttatctctt ctaactgggtc tggattacag acagaatcaa taccagagga  aatgaaacag attgttgagg aacagggaac taaactgcac tgggcagctc tctgatact  catggtgata ataccacaa ttggtggaaa tacccttgtt attctggctg tttcactgga  gaagaagctg cagtatgcta ctaattactt tctaattgcc ttggcgggtg ctgatttgtt  ggttggttg tttgtgatgc caattgccct cttgacaata atgtttgagg ctatgtggcc  cctccactt gttctatgtc ctgcttggtt attcttgac gttctctttt caaccgcac  catcatgcat ctctgtgcca tttcagtgga tctgtacata gccatcaaaa agccaatcca  ggccaatcaa tataactcac gggctacagc attcatcaag attacagtgg tgtggttaat  ttcaatagc attgccattc cagtccttat taaaggga gagactgatg tggacaaccc  aaacaatc acttggtgac tgacaagaac acttggtgac gatttcacg tctttggctc  actggctgct tctttcacac ctcttgcaat tatgattgtc acctactttc tcaatcca  tgctttacag aagaaggctt acttagtcaa aaacaagcca cctcaacgcc taacatggtt  gactgtgtct acagttttcc aaaggatga aacaccttg cgtcacccg aaaaggtggc  aatgctggat ggttctcgaa aggacaagc tctgcccac tcaagtgatg aacacattat  gcgaagaaca tccacaattg gaaaaagtc agtcagacc atttccaacg aacagagagc  ctcaaggctc ctagggttg tgttttctc ctttttgctt atgtgtgtgc cttctttat  tacaatatata actttagttt tatgtgattc ctgtaaccaa actactctcc aatgctcct  ggagatattt gtgtggatag gctatgtttc ctccaggagt aatcctttgg tctacacct  cttcaataag acatttcggg atgcatttgg ccgatatatc acctgcaatt accggggccac  aaagtcagta aaaactctca gaaaacgctc cagtaagatc tacttccgga atccaatggc  agagaactct aagtttttca agaaacatgg aattcgaat gggattaacc ctgccatgta  ccagagtcca atgaggctcc gaagttcaac cattcagttc tcaatcaatca tttactaga  tacgcttctc ctcaactgaa atgaagggtga caaaactgaa gagcaagtta gttatgtata  gcagaactgg cagttgtcat caaacataat gatgagtaag atgatgaatg agatgtaaat  gtgcccagaa tatattatat aaagaatttt atgtcatata tcaaatcatc tctttaacct  aagatgtaag tattaagaat atctaatttt cctaatttgg acaagattat tccatgagga  aaataatttt atatagctac aaatgaaaaa atccagcac tctggttaaa ttttaaggta  ttcgaatgaa ataaagtcaa atcaataaat ttcaggcttt aaaaaaaaaa  NP_000858.1 MALSYRVSEL QSTIPEHIQ STFFHVHSSN WSGLQTESIP EEMKQIVEEQ GNKLHMAALL P  ILMVIPTIG GNTLVILAVS LEKKLQYATN YFLMSLAVAD LVLGLFVMPI ALLTIMFEM  WPLPLVLCPA WFLDVLFTS ASIMHLCAIS VDRYIAIKKP IQANQNSRA TAFIKITVW  LISIGIAIPV PIKGIETDND NPNNITCVLT KERFGDFMLF GSLAAFFFTPL AIMIVTYFLT  IHALQKKAYL VKNKPPQRLT WLTVSTVFQR DETPCSSPEK VAMLDGSRKD KALPNSGDET</p>	Homo sapiens
14	133	5-HT2B Receptor	NP_000858.1	<p>MLLGLFVMPV SMLTILYGYR WPLPSKLCV WYLDVLFST ASIMHLCAIS LDRYVAIQNP  IHHSRFSNRT KAFLEKIIAW TISVGISMPI PVFGLQDDSK VFKEGSCLLA DDNFVLIGSF  VSFFIPLTIM VITYFLTIKS LQKEATLCVS DLGTRAKLAS FSELPQSSLS SEKLFQRSIH  REPGSYTGRR TMSISNEQK ACKVLGIVFF LFVVMWCPFF ITNINAVICK ESCNEDVIGA  LLNVFWIGY LSSAVNPLVY TLENKTYRSA FSRYIQCYK ENKKPLQLIL VNTIPALAYK  SSQLQMGQKK NSKQDAKTTD NDCSMVALGK QHSEEAASKDN SDGVNEKRVSC V  tactaaccat gctgaccact gttcgggaac ggattgaatc acagaaaaac agcaaatggc A  tctctcttac agagtgtctg aacttcaaag cacaattcct gagcacattt tgcagagcac  ctttgttcac gttatctctt ctaactgggtc tggattacag acagaatcaa taccagagga  aatgaaacag attgttgagg aacagggaac taaactgcac tgggcagctc tctgatact  catggtgata ataccacaa ttggtggaaa tacccttgtt attctggctg tttcactgga  gaagaagctg cagtatgcta ctaattactt tctaattgcc ttggcgggtg ctgatttgtt  ggttggttg tttgtgatgc caattgccct cttgacaata atgtttgagg ctatgtggcc  cctccactt gttctatgtc ctgcttggtt attcttgac gttctctttt caaccgcac  catcatgcat ctctgtgcca tttcagtgga tctgtacata gccatcaaaa agccaatcca  ggccaatcaa tataactcac gggctacagc attcatcaag attacagtgg tgtggttaat  ttcaatagc attgccattc cagtccttat taaaggga gagactgatg tggacaaccc  aaacaatc acttggtgac tgacaagaac acttggtgac gatttcacg tctttggctc  actggctgct tctttcacac ctcttgcaat tatgattgtc acctactttc tcaatcca  tgctttacag aagaaggctt acttagtcaa aaacaagcca cctcaacgcc taacatggtt  gactgtgtct acagttttcc aaaggatga aacaccttg cgtcacccg aaaaggtggc  aatgctggat ggttctcgaa aggacaagc tctgcccac tcaagtgatg aacacattat  gcgaagaaca tccacaattg gaaaaagtc agtcagacc atttccaacg aacagagagc  ctcaaggctc ctagggttg tgttttctc ctttttgctt atgtgtgtgc cttctttat  tacaatatata actttagttt tatgtgattc ctgtaaccaa actactctcc aatgctcct  ggagatattt gtgtggatag gctatgtttc ctccaggagt aatcctttgg tctacacct  cttcaataag acatttcggg atgcatttgg ccgatatatc acctgcaatt accggggccac  aaagtcagta aaaactctca gaaaacgctc cagtaagatc tacttccgga atccaatggc  agagaactct aagtttttca agaaacatgg aattcgaat gggattaacc ctgccatgta  ccagagtcca atgaggctcc gaagttcaac cattcagttc tcaatcaatca tttactaga  tacgcttctc ctcaactgaa atgaagggtga caaaactgaa gagcaagtta gttatgtata  gcagaactgg cagttgtcat caaacataat gatgagtaag atgatgaatg agatgtaaat  gtgcccagaa tatattatat aaagaatttt atgtcatata tcaaatcatc tctttaacct  aagatgtaag tattaagaat atctaatttt cctaatttgg acaagattat tccatgagga  aaataatttt atatagctac aaatgaaaaa atccagcac tctggttaaa ttttaaggta  ttcgaatgaa ataaagtcaa atcaataaat ttcaggcttt aaaaaaaaaa  NP_000858.1 MALSYRVSEL QSTIPEHIQ STFFHVHSSN WSGLQTESIP EEMKQIVEEQ GNKLHMAALL P  ILMVIPTIG GNTLVILAVS LEKKLQYATN YFLMSLAVAD LVLGLFVMPI ALLTIMFEM  WPLPLVLCPA WFLDVLFTS ASIMHLCAIS VDRYIAIKKP IQANQNSRA TAFIKITVW  LISIGIAIPV PIKGIETDND NPNNITCVLT KERFGDFMLF GSLAAFFFTPL AIMIVTYFLT  IHALQKKAYL VKNKPPQRLT WLTVSTVFQR DETPCSSPEK VAMLDGSRKD KALPNSGDET</p>	Homo sapiens

15	134	5-HT2C Receptor	nm_000868	V	LMRRTSTIGK KSVQTSISNEQ RASKVLGIVF FLFLMMWCPF FITNITLVLC DSCNQTLQOM LLEIFVWIGY VSSGWNPLVY TLFNKTRDA FGRIYTCNRYR ATKSVKTLRK RSSKIYFRNP MAENSKFFKK HGIRNGINPA MYQSPMRLRS STIQSSSIIL LDTLILLTENE GDKTEEQVSY	Homo sapiens
					accgcgcga ggtaggcgt ctggtgcttg cggaggacgc ttcttcctc agatgcacgc A atctcccca tactgccttt ggagcggcta gattgctagc cttggctgct ccatggcct gccttgccc ttacctgccg attgcatacg aactcttct ctgtctgtac atcgttgtcg tcggagtcgt cgcgacgtc gtggcgtcg tgtgatggcc ttcgctccgt tagagtagtg tagttagtta gggcccaacg aagaagaaag aagacgcgat tagtgacag atgctggagg tggtcagtta ctaagctaga gtaagatagc ggagcgaaaa gagccaaacc tagccggggg gcgcacggtc acccaaggga ggtcgactcg ccggcgcttc ctatcgcgcc gagtcctc cattcctct cctccgccga ggccgcaggt tgcggcgcc agcgcagcgc agctcagcgc accgactgcc gggggtccg ctgggcgatt gcagccgagt cgtttctcg tctagctgcc gccggggga ccgctgcctg gtcttctcc cggacgctag tgggttatca gctaacacc gcgagcatct ataacatagg ccaactgacg ccatacttca aaacaaacta aaggatgata tgatgaacct agcctgttaa ttctgtcttc tcaatttaa acttgggtg ctaagactg aagcaatcat ggtgaacctg aggaatgagg tgcattcatt cctgtgcac ctaattggcc tattggttg gcaatgtgat atttctgtga gccagtagc agctatagta actgacattt tcaatacct cgatgggtga cgttcaaat tccagacgg ggtacaaaa tggccagcac tttcaatcgt catcataata atcatgacaa taggtggcaa tctcctgtg atcatggcag taagcatgga aaagaaactg cacaatgccca ccaattactt ctaaatgtcc ctgaccattg ctgatatgct agtgggacta ttgtgcatgc cctgtgtct cctggcaatc ctttatgatt atgtctggcc actacctaga tatttggcc ccgtctggat ttctttagat gttttatttt caacagcgtc catcatgcac ctctgcgcta tatcgctgga tgggtatgta gcaataccta atcctattga gcatagccgt ttcaattcgc ggactaaggc catcatgaag attgctattg tttgggcaat ttctataggt gtatcagttc ctatccctgt gattggactg agggacgaag aaaagggtgt cgtgaacaa acgacgtgag tgcacaaga ccaaatctt gtctttattg ggtccttcgt agctttcttc ataccgtga cgattatggt gattacgtat tgcctgacca tctacgttct ggcgcgacaa gctttgatgt tactgcacgg ccacaccgag gaaccgcctg gactaaagtct ggatttcctg aagtgcgtga agaggaatac ggcgaggaa gagaactctg caaacccctaa ccaagaccag aacgcacgc gaagaaagaa aagcttcgaa agtcttggg attgtttct gcaccatgca ggctatcaac aatgaaagaa agcttcgaa tctattacca tttctgtctg ttgtgtttct gatcatgtgg tgccatttt tcataccga tttctgtct gtctttgtg agaagtcctg taaccaaaag ctcatggaaa agcttctgaa tgtgtttgt tggattggct atgtttgttc aggaatcaat cctctgtgtg atactctgt caacaaaatt taccgaaggg cattctccaa ctatttgcgt tgcaattata aggtagagaa aaagcctcct gtccaggcaga ttccaagagt tgcgcacct gctttgtctg ggaggagact taatgttaac atttatcggc ataccaatga accggtgac gagaaagcca gtgacaata gcccggtata gagatgcaag ttgagaattt agagttacca gtaaatccct ccagtggtgt tagcgaaagg attagcagt tgtgagaaag aacagcacag tcttttctta cggtaacaag tacatatgta ggaaaaattt cttctttaat tttctgtgtg gtcttaacta atgtaaatat tgcgtctctga aaaagtgtt	A

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ttaaggacag tgtcaaat ctgattatta caacaagcaa actgaaatta gtgttttcat  
tctgtctctt agtaattcc taattctatg attaaactgg gaaatgagat ccagagatta  
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tggatatata atctacccct tcaatgttaa atctacaaac tttataaat gttttaaaga  
agtcacatgt ataattgtaa aggtgatgaa ttaccatca acaaatcat tttagatgtat  
tattatata gtatatctgt gtaagacacg tgcacacagc tgccttatat tattttctgt  
aatcttctc ctttgtcaaa tggatatttt ttggaatggt tgcgaagtgt tgtcttattc

16	134	5-HT2C Receptor	NP_000859.1	ctaatctcgt tatgttatcc actacaggtt ttatgagact tcctattaat ttattaaatt tattaaatgt tgaaaaaaa aaaaaaaa aaaa MVNLRNAVHS FLVHLIGLLV WQCDISVSPV AAIVTDIFNT SDGGRFKFPD GVQNWPAISI P VIIIINTIGG NILVIMAVSM EKKLHNATNY FLMSLAIDM LVGLLVMPLS LLAILYDYVW PLPRYLCPVW ISLDVLFSTA SIMHLCAISL DRYVAIRNPI EHSRFSRSTK AIMKIAIWA ISIGSVPIPI VIGLRDEEKV FVNNTTCVLN DPNEVLIGSF VAFPIPLTIM VITYCLTIYV LRRQALMLLH GHTEEPPLS LDFLKCKRN TAEENSANP NQDNARRR KRERRPRGTM QAINNERKAS KVLGIVFFVF LIMWCPFFIT NILSVLCEKS CNQKIMEKLL NVFVWIGYVC SGINPLVYTL FNKIYRRAFS NYLRCNYKVE KKPPVRQIPR VAATALS GRE LVNVIYRHTN EPVIEKASDN EPGIEMQVEN LELPVPSSV VSERISSV	Homo sapiens
17	136	5-HT4 Receptor	NM_000870	cggtgcttat ttctgttaat ggacaaactt gatgctaag tgagttctga ggagggtttc A gggtcagtgga agaagtggt gctgctcacg tttctctcga cggttatcct gatggccatc ttggggaacc tgctggtgat ggtggctgtg tgctgggaca ggcagctcag gaaaataaaa acaaattatt tcattgtatc tcttgctttt gcgatctgc tggtttcggt gctggtgatg ccctttggtg ccattgagct ggttcaagac atctggattt atggggaggt gttttgtctt gttcggacat cctggacgt cctgctcaca acggcctcga tttttcacct gtgctgcatt tctctggata ggtattacgc catctgctgc cagcctttgg tctataggaa caagatgacc cctctgcgca tcgcattaat gctgggaggg tgctgggtga tccccacgtt tattctttt ctccctataa tgcaaggctg gaataacatt ggcataaattg attgataga aaagaggaag ttcaaccaga actctaactc tagtactgt gtcttcatgg tcaacaagcc ctacgccatc acctgctctg tgggtgacct ctacatccca tttctctca tgggtctggc ctattaccgc atctatgtca cagctaagga gcatgcccc cagatccaga tgttacaacg ggcaggagcc tctctcgaga gcaggcctca gtcggcagac cagcatagca ctcatcgcat gaggacagag accaaagcag ccaagacctt gtgcatcctc atgggttgc tctgcctctg ctgggcacca ttctttgtca ccaatattgt ggatcctttc atagactaca ctgtccctgg gcaggtgtgg actgctttcc tctggctcgg ctatatcaat tccgggttga acccttttct ctacgccttc ttgaataagt cttttagacg tgccttcctc atcatcctct gctgtgatga tgagcgctac cgaagacctt ccattctggg ccagactgtc ccttggttcaa ccacaacct taatgatcc acacatgtac taaggatgc agtgagtggt ggtggccagt gggagagtca gtgtcacccg ccagcaactt ctcccttggt ggctgctcag cccagtgaca cttaggcccc tgggacaatg acccagaaga cagccatgcc tccgaaagag ggccaggtcc taagctgctg cttgtgcgcg actgcaccgg gcattctctt caactgaggg tttccgtcgg ccagtgcagg aaccgggtgc tcgctggg	Homo sapiens
18	136	5-HT4 Receptor	NP_000861.1	MDKLDANVSS EEGFGSVEKV VLLTFLSTVI LMAILGNLLV MVAVCWDRQL RKIKTNYFIV P SLAFADLLVS VLMPFPGAIE LVQDIWIYGE VFCLVRTSLD VLLTASIFH LCCISLDRIY AICCCQLVYR NKMTPLRIAL MLGGCWVPT FISFLPIMQG WNNIGIIDLI EKRFENQNSN STYCVFMVVK PYAITCSVVA FYIPFLMLVL AYYRIYVTAH EHAHQIQMLQ RAGASSESRP QSADQHSRTH MRTETKAAT LCIMGCFCL CWAPFFVTNI VDPFIDYVTP GQVWTAFLWL GYINSGLNPF LYAFLNKSR RAFLLILCCD DERYRRPSIL GQTVPCSTTT INGTHVLRD AVEGGQWES QCHPPATSPL VAAQPSDT	Homo sapiens
19	138	5-HT6	NM_000871	cccagagagc cccattcacc cccctcacc acctccccg gttccccactt ccccgactc A	Homo

sapiens

Receptor

tgacccggcc ggacggccct ccctatctt gccgcccgc cctccaggg ggctctgctc  
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 ggctcatcg gtgcccctcc ccaacttcc aaccgtttg ctccaggagt tctgcccctc  
 tccccaggg cgcccaata gccacactgt gtctctctgt agtcgcccgc cctgacctc  
 gcgacacca gcgccccgc ccatgtccc ccaactacct cccccgggg gcgtggtgag  
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 gcagcggctg ggtggcgcc gcgtgtgag tggatcatgc gctgacggcg gcggccaaact  
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 tgaacgcgt gtaacggcgc tgggtgctg cgcgcggcct ctgctgctc tggaccgct  
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 tcaccaccg catggccagt caggcctcg agacgtgca ggtgcccagg accccacgc  
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 ctgggctaag accaggagc tgaagtctc ctagaagccc tctgagctcc agagggtgc  
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Caga

20 138

5-HT6  
ReceptorHomo  
sapiens

NP\_000862.1 MVPEPGTAN STPAWGAGPP SAPGGGWA AALCVIALT AANSLILAL ICTQPALRNT P  
 SNFFLVSLFT SDLMVGLVVM PPAMNLALYG RWVLARGLCL LWTAFDVMCC SASILNLCIL  
 SLDRYLLILS PLRYKLRTMP LRALALVIGA WSLAALASFL PLLGWHELG HARPPVPGQC  
 RLLASLPFVL VASGLTFELP SGAICFTYCR ILLAARKQAV QVASLTGMA SQASETQVFP  
 RTRPRGVESA DSRRLATKHS RKALKASLTL GILLGMFFVT WLPFFVANIV QAVCDCISPG  
 LFDVLTWLG CNSTWNPPIY PLFMRDFKRA LGRFLPCPRC PRERQASLAS PSIRTSHSGP  
 RPLSLQOVL PLPLPPDSDS DSDAGSGSS GLRLTAQLLL PGEATQDPPL PTRAAAVNF  
 FNIDPAEPPEL RPHPLGIPTN

21	139	5-HT7 Receptor	NM_000872	ccatgggcag cggcacacgg cggcgcgatg atggacgtta acagcagcgg ccgcccggac A ctctacggc acctccgctc ttctctctg ccagaagtgg ggcgcgggct gcccgacttg agccccagc gtggcgccga cccggtcggc ggtcctctgg cgcgcacact gctgagcgag gtgacagcca gcccgcgcc cactgggac ggcggccggg acaatgcctc cggctgtggg gaacagatca actacggcag agtcgagaaa gttgtgatcg gctccatcct gacgtctatc acgtgctga cgatcgcggg caactgcctg gtggtgatct ccgtgtgctt cgtcaagaag ctccgccgc cctccaaacta cctgatcgtg tccctgggc tggccgacct ctcggtggct gtggcggtca tgcctctcgt cagcgtcacc gacctcatg ggggcaagtg gatctttgga cactttttct gtaatgtctt catcgccatg gacgtcatgt gctgcacggc ctcgatcatg acctgtgcg tgatcagcat tgacaggtag cttgggatca caaggccctt cacataacct gtgaggcaga atgggaaatg catggcgaag atgattctct ccgtctggct tctctccgcc tccatcacct tacctccact ctttggatgg gctcagaatg taaatgatga taaggtgtgc ttgatcagcc aggaactttg ctatacgatt tactctaccg cagtggcatt ttatatcccc atgtccgtca tgcctttcat gtactaccag attacaagg ctgccaggaa gagtgtgctc aaacacaaat ttctctggctt cctcggatg gagccagaca gctcatcgc cctgaatggc atagtgaagc tccagaagga ggtggaagag tgtgcaaac ttcgagact cctcaagcat gaaaggaaa acatctccat ctttaagcga gaacagaaa cagccaccac cctggggatc atcgtcggg cctttaccgt gtgctggctg ccatttttcc tctctcgac agccagacct ttcatctgtg gcaactcctg cagctgcac ccatgtggg tggagaggac atttctgtg ctaggctatg caaactctct cattaacctt ttatatatg cctcttcaa cgggacctg aggaccacct atcgcagcct gctccagtgc cagtaccgga atatacaacc gaagctctca gctgcaggca tgcataagc cctgaagctt gctgagaggc cagagagacc tgagtttgtg ctacaaaaatg ctgactactg tagaaaaaa ggtcatgatt catgattgaa agcagaacaa tgag	Homo sapiens
22	139	5-HT7 Receptor	NP_000863.1	MMDVNSSGRP DLYGHLRSFL LPEVGRGLPD LSPDGGADPV AGSWAPHLLS EVTASPAPTW P DAPPDNASGC GEQINYGRVE KWIGSILTL ITLLTIAGNC LVVISVCFVK KLRQPSNYLI VSLALADLSV AVAVMPFVSU TDLIGSKWIF GHFFCNVFA MDVMCTASI MTLCVISIDR YLGITRPLTY PVRQNGKMA KMILSVWLLS ASITLPLFG WAQNVNDDKV CLISQDFGYT IYSTAVAFYI PMSVLMFY QIYKAARKSA AKHKFPGFPR VEPDSVIALN GIVKLQKEVE ECANLSRLK HERKNISIFK REQKAATTIG IIVGAFTVCW LPFFLLSTAR PFICGTSCSC IPLWVERTEL WLGYANSLIN PFIYAFENRD LRTTYRSLIQ COYRNINRKL SAAGMHEALK LAERPERPEF VLQADYCRK KGHDS atgagtgta gaagtgtgaa ggggtcctgt tctgaatccc agagcctcct ctccctctgt A gaggctggca ggtgaggaag ggtttaacct cactggaagg aatccctgga gtagcggct gctgaaggcg tggaggtgtg ggggcacttg gacagaacag tcaaggcagcc gggagctctg ccagctttgg tgacctggg cggggctggg agcgtgctgg cgggagccgg aggaactatg gctgccgcgc gttgtccaga gccagccca gccctacgc gccggcccg agctctgttc cctggaactt tgggcactgc ctctgggacc cctgcggcc agcaggcagg atggtgcttg cctcgtgcc cttggtgccc gtctgctgat gtgccagcc tgtgcccgcc atgccgccct ccatctcagc ttccaggcc gccatcagc gctcagagt gctcatcgcc ctggtctctg tgccccggaa cgtgctggtg atctggggcg tgaaggtgaa ccaggcgctg cgggatgcca	Homo sapiens
23	272	Adenosine A1 Receptor	NM_000674	atgagtgta gaagtgtgaa ggggtcctgt tctgaatccc agagcctcct ctccctctgt A gaggctggca ggtgaggaag ggtttaacct cactggaagg aatccctgga gtagcggct gctgaaggcg tggaggtgtg ggggcacttg gacagaacag tcaaggcagcc gggagctctg ccagctttgg tgacctggg cggggctggg agcgtgctgg cgggagccgg aggaactatg gctgccgcgc gttgtccaga gccagccca gccctacgc gccggcccg agctctgttc cctggaactt tgggcactgc ctctgggacc cctgcggcc agcaggcagg atggtgcttg cctcgtgcc cttggtgccc gtctgctgat gtgccagcc tgtgcccgcc atgccgccct ccatctcagc ttccaggcc gccatcagc gctcagagt gctcatcgcc ctggtctctg tgccccggaa cgtgctggtg atctggggcg tgaaggtgaa ccaggcgctg cgggatgcca	Homo sapiens

ccttctgctt catcgtgtcg ctggcggttg ctgatgtggc cgtgggtgccc ctggtcatcc  
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[illegible]

26	273	Adenosine A2a Receptor	NP_000666.2	MPIMGSSVYI TVELAIAVLA ILGNVLVCWA VMLNSNLQNV TNYFVVSLLAA ADIAGVLAI P PFAITISTGF CAACHGCLFI ACFLVLTQS SIFSLAIAI DRYIAIRIPL RYNGLVGTGR AKGIIAICWV LSFALGILTPM LGWNNGQPK EGNHSQCG EGQVACLIFED VPMNYMYVF NEFACVLVPL LMLGVYLRI FLAARRQLKQ MESQPLPER ARSTLQKEVH AAKSLAIIIVG LFALCWLP LH IINCFTFFCP DCSHAPLWLM YLAIVLSHTN SVNPFYIYAY RIREFRQTFR KIIRSHVLRQ QEPFKAAGTS ARVLAHAGSD GEQVSLRLNG HPPGVWANGS APHPERRPNG YALGLVSGGS AQESQNTGL PDVELLSHEL KGVCPEPPGL DDPLAQDGAG VS	agtgacaaaag ctgggatcaa ggatagggag ttgtaacaga gcagtgccag agcatggggc cagggtccag gggagaggtt ggggctggca ggccactggc atgtgtgag tagcgagag ctaccagtg agaggcttg tctaaactgc ttctctcta aagggaatgt tttttctga gataaaataa aaacgagcca catcgtgtt taagcttgtc caaatgaaaa aaaaaaaa aaa	Homo sapiens
27	274	Adenosine A2b Receptor	NM_000676	gggcaatttg ttagttatcc gccgccacca agacgcggca cggcgctctgg accggagggg A ccccgcggg gcgcgaactt tgggctcggg cgagtgggtg gtgctccgcc cagcccgaga cgggcggggc cgcgggcca tgggtgcgc cttctggccg cggggggccc cgaccctgg gtcccgcca ccagcgcgc agccccgag ctcagaaagc gcaggcgag gcggtccg ggcgtatgg ccattgccc cgggtctcac cgggtgccc ctcgcccgc gcgcttcgg tagggggcgc cgggggcca atcgcccg gctgctgtct ggagacacag gacgcgtgt acgtggcgt ggagctggtc atcgccgc tttcgtggc ggcaacgtg ctggtgtgcg ccgcgggtgg cagcgggaa actctgcaga cggccacca ctactctctg gtgtccctg ctgcggcga cgtggcgtg gggctcttcg ccaccacct tgcctcacc atcagcctg gcttctgcac tgacttctac ggtgctctc tctcgctctg ctctgctg gtgtcacgc agagctccat cttcagcctt ctggcgtgg cagtcgacag atactggcc atctgtctc cgctcagga taaaagtgtg gtcacgggga cccagagcaag aggggtcatt gctgtcctt gggtccttg ctttggcatc gatttgactc cattcctgg gtggaacagt aaagacagt ccaccaaaa ctgcacagaa cctggggatg gaaccacgaa tgaaagctgc tgccttgga agtgtctct tgagaatgtg gtccccatga gctacatggt atatttcaat ttctttgggt gtgttctgccc cccactgctt ataagtctgg tgatctacat taagatcttc ctggtggcct gcaggcagct tcagcgact gagctgatgg accactcgag gaccacctc cagcgggaga tccatgcagc caagtcactg gccatgattg tggggatttt tgcctgtg tggttacctg tgcatgctgt taactgtgtc actctttcc agccagctca gggtaaaaaat agcccaagt gggcaatgaa tatggccatt cttctgtcac atgccaattc agtgtcaat cccattgtct atgcttaccc gaaccgagac ttccgctaca cttttcaca aattatctcc aggtatcttc tctgccaa gcagtgctcaag agtgggaatg gtcaggctgg ggtacagcct gctctgggtg tgggcctatg atctaggctc tcgctcttc caggagaaga tacaatcca caagaacaa agaggacag gctgggtttc attgtgaaag atagctacac ctcaagga aatggactgc ctctcttgag cactccctg gagctaccac gtatctagct aatatgtatg tgtcagtagt aggctccaa gattgacaaa tataattatg atctattcag ctgcttttac tgtgtggatt atgccaaacag cttgaaatgga ttctaacaga cttttttgtt tttaaaagtc tgcctgttt atggtggaaa attactgaaa ctattttact gtgaacaggt gtgaactatt ataatagcaa tactttttta cttagaggga atggaataat aaaagttgac tgtactaaaa atg	gggcaatttg ttagttatcc gccgccacca agacgcggca cggcgctctgg accggagggg A ccccgcggg gcgcgaactt tgggctcggg cgagtgggtg gtgctccgcc cagcccgaga cgggcggggc cgcgggcca tgggtgcgc cttctggccg cggggggccc cgaccctgg gtcccgcca ccagcgcgc agccccgag ctcagaaagc gcaggcgag gcggtccg ggcgtatgg ccattgccc cgggtctcac cgggtgccc ctcgcccgc gcgcttcgg tagggggcgc cgggggcca atcgcccg gctgctgtct ggagacacag gacgcgtgt acgtggcgt ggagctggtc atcgccgc tttcgtggc ggcaacgtg ctggtgtgcg ccgcgggtgg cagcgggaa actctgcaga cggccacca ctactctctg gtgtccctg ctgcggcga cgtggcgtg gggctcttcg ccaccacct tgcctcacc atcagcctg gcttctgcac tgacttctac ggtgctctc tctcgctctg ctctgctg gtgtcacgc agagctccat cttcagcctt ctggcgtgg cagtcgacag atactggcc atctgtctc cgctcagga taaaagtgtg gtcacgggga cccagagcaag aggggtcatt gctgtcctt gggtccttg ctttggcatc gatttgactc cattcctgg gtggaacagt aaagacagt ccaccaaaa ctgcacagaa cctggggatg gaaccacgaa tgaaagctgc tgccttgga agtgtctct tgagaatgtg gtccccatga gctacatggt atatttcaat ttctttgggt gtgttctgccc cccactgctt ataagtctgg tgatctacat taagatcttc ctggtggcct gcaggcagct tcagcgact gagctgatgg accactcgag gaccacctc cagcgggaga tccatgcagc caagtcactg gccatgattg tggggatttt tgcctgtg tggttacctg tgcatgctgt taactgtgtc actctttcc agccagctca gggtaaaaaat agcccaagt gggcaatgaa tatggccatt cttctgtcac atgccaattc agtgtcaat cccattgtct atgcttaccc gaaccgagac ttccgctaca cttttcaca aattatctcc aggtatcttc tctgccaa gcagtgctcaag agtgggaatg gtcaggctgg ggtacagcct gctctgggtg tgggcctatg atctaggctc tcgctcttc caggagaaga tacaatcca caagaacaa agaggacag gctgggtttc attgtgaaag atagctacac ctcaagga aatggactgc ctctcttgag cactccctg gagctaccac gtatctagct aatatgtatg tgtcagtagt aggctccaa gattgacaaa tataattatg atctattcag ctgcttttac tgtgtggatt atgccaaacag cttgaaatgga ttctaacaga cttttttgtt tttaaaagtc tgcctgttt atggtggaaa attactgaaa ctattttact gtgaacaggt gtgaactatt ataatagcaa tactttttta cttagaggga atggaataat aaaagttgac tgtactaaaa atg	Homo sapiens

28	Adenosine A2b Receptor	NP_000667.1	MLLETQDALY VALELVIAAL SVAGNVLVCA AVGTANTLQI PTNYFLVSLA AADVAVGLFA P IPFAITISLG FCTDFYGCLE LACFVLVLTQ SSIFSLAVA VDRYLAICVP LRYKSLVTGT RARGVIAVLW VLAFIGIGLTP FLGWSKDSA TNNCTEPWDG TTNESCCLVK CLFENVVPMMS YMYVFNFFGC VLPPLLIMLV IYIKIFLVAC ROLQRTLEMD HSRTTLQREI HAAKSLAMIV GIFALCWLPV HAVNCVTLFQ PAQGNKPKW AMNMAILLSH ANSVNPIVY AYRNRDFRYT FKHIIISRYLL CQADVKSNG QAGVQPALGV GL	Homo sapiens
274			atctttgctg caaaggctgg gtatggctg tgctcagcaa agcgtcaact cgtgcaagaa A cttagcagga atagttctgg ctaagggttag gaggtgcca ccaaaagtctc tttttgttc ctctgcttct cccgtttgccc tcttatcat gagatctttt tgctaagctg gcagaaagat tgcatagtca gtgcttccag ctctgctccc acctgacct gcactgtcct ctggtccctg aatgaatgaa ctctgatacc caatctgtc tcgagcctc tctatgccac tcatggctcc tcttctgtc tttccatctt tttgtgaga gttctgagct ctgtacttcc tcttgcccc tctcacttcc tgaacacccc ctgaagaggg ttgcttatct tgatggaact caaaaagcca aaaagctgca ggcagagggc ttgaggacat ctgtttgggg aactaagagc agcagcactt tcagattcag tccatataga gctgtcctac agcattctgg aaacttgagg atgtgcggtg cataaaaggg ctggaagtga cccacctgtg atgagccctt tctaagagga agggtttcca agagatcacc ccaccagaaa aggttaggaa tgagcaagt gggaatttta gactgtcact gcacatggac ctctgggaag acgtctggcg agagtaggc ccaactggccc tacagacgga tcttgtggc tcacctgtcc ctgtggaggt tcccctggga aggcaagatg cccaacaaca gcactgctct gtcattggcc aatgttacct acatcacct ggaattttc attggactct gcgccatagt gggcaacgtg ctggtcatct cggtggtcaa gctgaacccc agcctgcaga ccaccacct ctatttcatt gtctctctag cctggctga cattgtgtt ggggtgctgg tcatgcctt ggccattgtt gtcagcctgg gcatacaat ccacttctac agctgcctt ttatgacttg cctactgctt atctttacc acgctccat catgtccttg ctggccatcg ctgtggaccg atacttgcg gtcaagctta ccgtcagata caagaggggtc accactcaca gaagaatatg gctggccctg ggcctttgct ggctgggtg atctctgggtg ggaatgaccc ccatgttttg ctggaacatg aaactgacct cagagtacca cagaaatgtc accttccctt catgccaat tgtttccgtc atgagaatgg actacatggt atacttcagc ttcctcactt ggattttcat cccctgggtt gtcattgctg ccatctatct tgacatcttt tacatcattc ggaacaaact cagtctgaac ttatctaact ccaagagagc aggtgcattt tatggacggg agttcaagac ggctaagtcc ttgtttctgg tcttttctt gttgtctctg tcatggctgc ctttatctat catcaactgc atcatctact ttaatgggtg ggtaccacag cttgtgctgt acatgggcat cctgctgtcc catgccact ccatgatgaa cctatcgtc tatgcctata aaataaagaa gttcaaggaa acctacctt tgatcctcaa agcctgtgtg gtctgccatc cctctgattc ttggacaca agcattgaga agaattctga gtgttatcc atcagagatg actctgtctc attgacctc agattcccca tcaacaaaca ctgagggcc tgtatgcctg ggccaagga tttttacatc cttgattact tccactgagg tggagagcatc tccagtgtc cccaattata tctccccac tccactactc tcttctcca ctccattttt cctttgtcct ttctctctaa ttcagtggtt tggaggcctg acttggggac aactatttat tgatattatt gtctgttttc cttcttcca atagaagaat aagtcattgga gcctgaaggg tgcctagtgtg acttactgac aaaaggctct agttgggctg aacatgtgtg tgggtgtgac tcatttccat	Homo sapiens
275	Adenosine A3 Receptor	NM_000677		

[illegible]

34	Alpha 1d- adrenoceptor	NP_000669.1	ctcaagtacc cagccatcat gaccgagcgc aaggcgccgc ccactcctggc cctgctctgg gtcgtagccc tgggtggtgc cgtaggcccc ctgctgggct ggaaggagcc cgtgccccct gacgagcgt tctgcggtat caccgaggag gcgggctacg ctgtcttctc ctccgtgtgc tcctttctacc tgcccatggc ggtcatcgtg gtcatgtact gccgctgta cgtggtcgcg cgagcacca cgcgcagcct cgaggcaggc gtcaagcgcg agcagggcaa ggcctccgag gtggtgctgc gcatccactg tcgcgccgcg gccacgggcg ccgacggggc gcaegggcatg cgacggcca agggccacac ctccgcagc tcgctctccg tgcgctgct caagtctccc cgtgagaaga aagcgggcaa gactctggcc atcgctggtg gtgtcttcgt gctctgctgg ttccctttct tctttgtcct gccgtcggc tccctgttcc cgcagctgaa gccatcgag ggcgtcttca aggtcatctt ctggtcggc tacttcaaca gctgctgaa ccgctcatc taccctgtt ccagccgcga gttcaagcgc gccttctcc gtctcctgc ctgcccagtc cgtcgtgcc ggcgcgcgcg cctctcttgg cgtgtctacg gccaccactg gcgggctccc accagcgcc tgcgccagga ctgcgccccg agtcggggc acgcgcccc cggagcgccg ctggccctca ccgcgctccc cgaccccgac ccgaacccc caggcacgcc cgagatgcag gtcccggtcg ccagccgtcg aaagccaccc agcgcctcc gcgagtggag gctgctgggg ccgttcgga gaccacgac ccagctgcgc gccaaagtct ccagcctgtc gcacaagatc cgcgccggg gcgcgcagc cgcagaggca gcgtgcgcc agcgtcaga ggtggaggct gtgtccctag cgtcccaaca cgagtggtgc gagggcgcca cctgccaggc ctacgaattg gccgactaca gcaacctacg ggagaccgat atttaaggac ccagagcta ggcgcggag tgtctgggc ttgggggtaa gggggaccag agaggcggc tgggtttcta agagcccccg tgcaaatcgg agaccggaa actgatacagg gcagctgctc tgtgacatcc ctgaggaact gggcagagct tgaggctgga gcccttgaaa ggtgaaaaagt agtggggccc cctgctggac tcaggtgccc agaactcttt tcttagaagg gagaggtcg gggctccgtg gggccttttg ctcccaatcc ctatttgaga aacactgccc catcctccat gccctgaacc ctgagttagc agccccaaag atggccagga aggcctgccc SGEDNRSSAG EPGSAGAGGD VNGTAAVGGL VWSAQGVGVG PAVGGVPVGG GGGGVVGGAG P MTFRDLLSVS FEGPRPDSSA GSSSAGGGG VLSAQGVGVG VFLAAFILMA VAGNLLVILS VACNRHLQTV TNYFIVNLAV ADLLSATVL PFSATMEVLG FWAFFRAFCV VMAAVDVLCC TASILSLCTI SVDRYVGVHR SLKYPAINTE RKAAILALL WVVALVSVG PLLGWKEPVP PDERFCGITE EAGYAVFSSV CSFYLPMAVI VMYCRVYV ARSTTRSLEA GVKRERKGAS EVVLRHCRG AATGADGAHG MRSAGHTFR SLSVRLLEK SREKKAATL AIUVGVFVLC WFPFFVLPL GSLFPQLKPS EGVFVIFWL GFNSCVNPL IYPCSSREFK RAFLRLRCQ CRRRRRRRPL WRVYGHWRRA STSGLRQDCA PSSGDAPPGA PLALTALPDP DPEPPGTPEM QAPVASRRKP PSAFREWRL GFRRPTTQL RAKVSSLSHK IRAGGAQRAE AACQAQRSEVE AVSLGVPHEV AEGATCQAYE LADYSNLRET DI 376	377	Alpha 1b- adrenoceptor	NM_000679	aggcaggaga cgtgctgcg gctgggctgc ccgggggaga tgactcctgc caggaggcg A cctctgggaa gaagaccacg ggggaagcaa agtttcaggg cagctgagga gccttcgcg cagcccttcc gagcccaatc atccccagg ctatggaggg cggactctaa gatgaatccc gacctggaca ccggccacaa cacatcagca cctgcccact ggggagagtt gaaaaatgcc aacttcaactg gcccacaa cagctcgagc aactccacac tgccccagct ggacatacc aggcccatct ctgtgggcct ggtgtgggc gccttcatcc tctttgccat cgtgggcaac	Homo sapiens	Homo sapiens
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36	Alpha 1b- adrenoceptor	NP_000670.1	<p>atcctagtca tcttgtctgt ggctgcaac cggcacctgc ggacgcccc caactacttc</p> <p>attgtcaaac tggccatggc cgacctgctg ttgagcttca cegtcctgcc ctctcagcg</p> <p>gccctagagg tgcctgggcta ctgggtgctg gggcgatctt tctgtgacat ctgggcagcc</p> <p>gtggatgtcc tgtgctgcac agcgtccatt ctgagcctgt ggcacatctc catcgatcgc</p> <p>tacatcgggg tgcgctactc tctgcagtat ccacgctgg tcaccgggag gaaggccatc</p> <p>ttggcgctgc tcagtgtctg ggtcttgtcc accgtcatct ccacggggcc tctccttggg</p> <p>tggaaaggagc cggcaccaca cgatgacaag gagtgcgggg tcaccgaaga acccttctat</p> <p>gccctcttct cctctctggg ctctctctac atccctctgg cggtcattct agtcatgtac</p> <p>tgccgtgtct atatagtggc caagaagaac accaagaacc tagaggcagg agtcatgaag</p> <p>gagatgtcca actccaagga gctgacctg aggatccatt ccaagaactt tcacgaggac</p> <p>acccttagca gtaccaaggc caagggccac aacccaggga gtccatagc tgtcaaaactt</p> <p>tttaagtctt ccagggaata gaaagcagct aagacgttgg gcattgtggt cggtatgttc</p> <p>atcttgtgct ggtaccctt cttcatcgct ctaccgcttg gctccttgtt ctccaccctg</p> <p>aagcccccg acgcgtgtt caagtggtg ttctggctgg gctactcaa cagctgcctc</p> <p>aaccccatca tctaccatg ctccagcaag gagtccaag gcgtttcgt gcgcatactc</p> <p>gggtgccagt gccggggcg cggccgcgc cgcgcgcgc cgcgcgcgc cctggggcgc</p> <p>tgcgctaca cctaccggc gtggacgctg cgcgcgcgc tggagcgtc gcagtcgcgc</p> <p>aaggactcgc tggacgacag cggcagctgc ctgagcggca gccagcggac cctgcctcg</p> <p>gctcgcga gccgggcta cctgggcgc ggcgcgcac cgcagtcga gctgtgcgc</p> <p>ttccccagt ggaaggcgcc cggcgccctc ctgagcctgc cgcgcctga gcccccgcc</p> <p>cgcgcggcc gccacgactc gggccgcctc ttacacttca agtccctgac cgagcccgag</p> <p>agccccggga ccgacggcg cgcacgaac ggagcgtcg aggcgcggc cgacgtggcc</p> <p>aacgggcagc cgggttcaa aagcaacatg cccctggcg cgggcagtt ttagggcccc</p> <p>cgtgcgcagc tttctttccc tggggaggaa aacatcgtgg ggggga</p>	Homo sapiens
37	Alpha 1c- adrenoceptor	NM_000680	<p>gaattccgaa tcatgtgcag aatgctgaat ctctccccc ctagacagcg A</p> <p>cggaagaaga gattctcgtg attctggaa tgcattgtgc aaggagtctc ctggatcttc</p> <p>gcacccagct tcgggtaggg agggagtccg ggtcccgggc taggcagcc cggcaggtgg</p> <p>agaggggtccc cggcagcccc gcgcgcccc ggcctatgtc ttaatgccc gcccttcac</p> <p>gtggccttct gaggttccc agggctggcc agggttgttt cccacccgc cgcgcgctct</p> <p>cacccccagc caaacccacc tggcagggtt cctccagcc gagacctttt gattcccgcc</p> <p>tcccgcgtc cgcctccgc gccagcccg gaggtggccc tggacagccg gacctgccc</p> <p>ggccccggct gggaccatgg tgtttctctc gggaaatgct tccgacagct ccaactgcac</p>	Homo sapiens

38	Alpha 1c- adrenoceptor	NP_000671.1	<p> ccaaccgccc gcaccgggtga acatttccaa ggccattctg ctccggggtga tcttggggggg  cctcattctt ttccggggtgc tgggtaacat cctagtgtac ctctccgttag cctgtcacccg  acacctgcac tcagtcacgc actactacat cgtcaacctg gcgggtggccg acctcctgct  cacctccacg gtgctgccct tctccgccat cttccgaggtc ctaggctact gggccttcgg  cagggtcttc tgcaacatct gggcggcagt ggatgtgctg tgctgcaccg cgtccatcat  gggcctctgc atcatctcca tcgaccgcta catcgccgtg agctaccgcg tgcgtaccc  aaccatcgtc accagagga ggggtctcat ggctctgctc tgcgtctggg cactctccct  ggtcatatcc attgacccc ttctcggctg gaggcagccg gcccccgagg acgagacccat  ctgccagatc aacgaggagc cgggctacgt gctcttctca gcgctgggct cctctacct  gcctctggcc atcatcctgg tcatgtactg ccgctctac gtggtggcca agaggagag  ccggggcctc aagtctggcc tcaagaccga caagtcggac tcggagcaag tgacgtccg  catccatcgg aaaaacgccc cggcaggagg cagcgggatg gccagcgcca agaccaagac  gcaattctca gtgaggctcc tcaagttctc ccgggagaag aaagcggcc aacgctggg  catcgtggtc ggtgcttctg tctctgctg gctgcctttt ttcttagtca tgccattgg  gtctttcttc cctgatttca agccctctga aacagttttt aaaaatagtat ttggctcgg  atatctaaac agtgcataca accccatcat ataccatgc tccagccaag agttcaaaaa  ggcctttcag aatgtcttga gaatccagtg tctccgcaga aagcagtctt ccaaacatgc  cctgggtac accctgcacc cggccagcca ggccgtggaa gggcaacaca aggacatggt  gcgcacccc gtggatcaa gagagacctt ctacaggatc tccaagacgg atggcgtttg  tgaatggaaa tttttctctt ccattgcccc tggtatctgc aggattacag tgtccaaaaga  ccaatcctcc tgtaccacag cccgggtgag aagtaaaagc tttttggagg tctgctgctg  tgtagggcc tcaaccccca gccttgacaa gaaccatcaa gtccaacca ttaagggtcca  caccatctcc ctcagtga gaaggaggga agtctaggac aggaagatg cagaggaaag  gggaataatc ttaggtacct accccacttc ctctcggaa ggcagctct tcttgagga  caagacagga ccaatcaaa aggggacctg ctgggaatgg ggtgggtggt agaccaact  catcaggcag cgggtagggc acagggaaga gggagggtgt ctcaacaaca accagttcag  aatgatacgg aacagcattt ccctgcagct aatgctttct tggctactct gtgccactt  caacgaaaac caccatggga aacagaattt catgcacaa ccaaaagact ataaatatag  gattatgatt tcatcatgaa tttttgagc acacactcta agtttgagc tatttcttga  tggaagtgag gggattttat tttcaggctc aacctactga cagccacatt tgacatttat  gccggaattc </p>	Homo sapiens
379			<p> SSNCTQPPAP VNISKAILLG VILGGLILFG VLGNILVILS VACHRLHSV P  THYIYINLAV ADLLLTSTVL PFSAlFEVLG YWAFGRVFCN IWAADVLLCC TASIMGLCII  SIDRYIGVSY PLRYPTIVTQ RRGIMALLCV WALSLVISIG PLFGWRQPPAP EDETICQINE  EPGYVLFSAI GSFYLPALII LMVYCRVYV AKRESRGLKS GLKTDKSDSE QVTLRIHRKN  APAGSGMAS AKTKTHFSVR LLKFSREKKA AKTLGIWVGC FVLCWLPFFL VMPIGSFFPD  FKPSETVFKI VFVLGYLNSC INPIIYPCSS QEFKAFQNV LRIQCLRRKQ SSKHALGYTL  HPPSQAVEGQ HKDMVRIPVG SRETFYRISK TDGVCEWKFF SSMPRGSARI TVSKDQSSCT  TARVRSKSL EVCCCVGPST PSLDKNHQVP TIKVHTISLS ENGEEV  gcgctcgccg ccacaccggc ggacgcccag gagaaccctt gcctccgctcg cggtcctctgg A  agagctgac gtccacctgc cccggcccg ctaggagcgg ggggtgccttc atgcggcccc </p>	Homo sapiens
39	Alpha 2a- adrenoceptor	NM_000681		

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44	389	Alpha 2c- adrenoceptor	NP_000674.1	MA SPALAAAL AVAAAAGPNA SGAGERSGG VANASGASWG PPRQYSAGA VAGLAAVVG P LIVFTVGNV LVVIAVLTSR ALRAPQNLFL VSLASADILV ATLVMFSLA NELMAYWYFG QWCGVYLAL DVLFTSSIV HLCALSLDRY WSVTQAVEYN LKRTPRRVKA TIVAVWLISA VISFPPLVSL YRQPDGAAYP QCGLNDETMY ILSSCIGSFF APCLIMGLVY ARIYRVAKR TRTLSEKRAP VGPDGASPTT ENGLGAAAGE ARTGTARPR PTWSRTRAAQ RPRGGAPGPL RRGRRRAGA EGGAGGADGQ GAGPGAQSG ALTASRSPG GGRLSRASSR SVEFFLSRRR RARSSVCRK VAQAREKRFT FVLAVVMGVF VLCWFPEFFI YSLYGICREA CQVPGPLPKF FFWIGYCNSS LNPVIYTVFN QDFRPSFKHI LFRRRRRGRF Q	Homo sapiens
45	599	Bradykinin B1 Receptor	NM_000710	ctgtgcatgg catcatcctg gccccctcta gagctccaat cctccaacca gagccagctc A ttccctcaa atgtctacggc ctgtgacaat gctccagaag cctgggacct gctgcacaga gtgctgccga catttatcat ctccatctgt ttcttcggcc tcttagggaa cctttttgtc ctgttggtct tctcctgccc cggcgccgaa ctgaacgtgg cagaaatcta cctggccaac ctggcagcct ctgatctggt gttgtcttg cgttgccct ctctgcccgtg tcatcaacgg ggtcatcagg aaccagtta actggccttt cggagccctc ctctgcccgtg gtggccatca gccaggaccg ctaccgctg gccaatgtgt tcatcagcat ctctctggtg gtggccatca gccaggaccg ggtcacctgc ctggcgacc ctatggccag cggaaaggcag cagcgccgga gccaggcccc ggtcacctgc gtgctcatct ggggtgtggg gggcctcttg agcatcccca cattcctgct gcgatccatc caagccgtcc cagatctgaa catcacccgc tgcacctgc tctccccca tgaggcctgg cactttgcaa ggaattgtga gttaaatatt ctgggttctc tctaccact ggtgcgac gtcttcttca actaccacat cctggcctcc ctgcgaacgc gggaggagggt cagcaggaca agagtgcggg ggcgaagga tagcaagacc acagcgtga tctcacgct cgtgggtgccc ttcctggtct gctgggcccc ttaccacttc tttgccttcc tggaaattctt attccagggtg caagcagtc gaggtgctt ttggggaggac ttcatcgacc tgggctgca attggccaac ttctttgct tcaactaacag ctccctgaat ccagtaattt atgtctttgt gggccggctc ttcaggacca aggtctggga actttataa caatgcacc ctaaaagtct tgctccaata tcttcatccc ataggaaaga aatcttccaa cttttctggc ggaattaaaa cagcattgaa	Homo sapiens

CC

46	599	Bradykinin B1 Receptor	NP_000701.1	MASSWPPELE QSSNQSLFP QNATACDNAP EAWDLLHRVL PTFIISICFF GLLGNLFVLL P	Homo sapiens
				VFLPRRQLN VAEIYLANLA ASDLVFVLGL PFWAENIWNQ ENWPFGALLC RVINGVIKAN	
				LFISIFLVVA ISQDRYRVLV HPMASGRQQR RQARVTCVL IMVVGLLSI PTFLLRSIQ	
				VPDLNITACI LLLPHEAWHF ARIVELNILG FLLPLAAIVF FNYHILASLR TREEVSRTRV	
				RGPKDSKTTA LILTLVAFV VAWAPYHFFA FLEFLFQVA VRGCFWEDFI DLGLQLANFF	
				AFTNSSLPV IYVFGRLFR TKWELYKQC TPKSLAPIS SHRKEIFQLF WRN	
47	600	Bradykinin B2 Receptor	NM_000623	atgtttctc cctggaagat atcaatgttt ctgtctgttc gtgaggactc cgtgccacc A	Homo sapiens
				acggcctctt tcagcgccga catgctcaat gtcacctgc aagggccac tcttaacggg	
				acctttgcc agagcaaatg ccccaagtg gagtggctgg gctggctcaa caccatccag	
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				ggtccctgat acaacctgg agaccaggat ttatggctc cctcactga tggacaagg	
				ggtctgtgcc aaagaagaat ccaataagca catattgagc acttgctgta tatgcagtat	
				tgagcactgt aggcaagacc caagaagag aaggagccat ctccatcttg aaggaaactca	
				aagactcaag tgggaacgac tgggcaactgc caccaccaga aagctgttcg acgagacggt	
				cgagcagggt gctgtgggtg atatgacag cagaaggggg agaccaagggt tccagctcaa	
				ccaataacta ttgcacaacc acctgtcct gcctcagttc cctttatgt aacatgaagt	
				cgttgtgagg gtaaaaggca gtaacaggta taaagtactt agaaagcaa aggggtgctac	

48	600	Bradykinin B2 Receptor	NP_000614.1	<p>gtacatgtga ggcatacatta cgagagcgta actgggatat gttactata aggaaaagac  actgaggtct agaaatagct ccgtggagca gaatcagtat tgggagccgg tggcgggtgtg  aagcaccagt gtctggcaca cagttagtgc tcattggctc ccttccacct gtcattccca  ccacctgag gcccaaccg ccacacacac aggagcattt ggagagaagg ccatgtcttc  aaagtctgat ttgtgatgag gcagaggaag atatttctaa tcgggtcttcg ccagaggatc  acagtgtga gacccccac caccagccgg tacctgggaa gggggagagt gcaggccctgc  tcagggactg ttctgtctc agcaaccaag ggattgttcc tgtcaatcaa tggtttattg  gaaggtggcc cagtatgagc cctagaagag tgtgaaaagg aatggcaatg gtgttcacca  tcggcagtcg cagggcagca ctcatcact tgataaatga atatttatta gctggttgga  gagctagaac ctggagagct agaacctgga gaactagaac ctggagggtc agaacctgga  gaggctagaa ccaagaaggg ctagaacctg gaggggctag aacctagaga agctaaaacc  tgagctagaa gctggaggac tagaacctgg agggctgga tctgaagggc tagaacctgg  agggtggaa tctggagagc tagaacctgg agggctagaa cctggagggc tagaacctag  aagggtaga acctggaggg ctggaatctg gagagctaga acctggaggg ctagaacctg  gagggtaga acctagaagg gctagaacct ggagggttag aacctggcag gttagaacct  agaagggtc gaacctggag agccagaacc tggagggtc gaacctggaa gggctagaac  ctgtagagct agaactgga gagctagaac ccggcaggct agaacctggc agctagaac  ctggagggaa tgaacctgga gggctagaac ctggagaagt agaaaaatct acatggcaaa  gagccataa atctgacca atccaaactc gaattttaaa gcaaaagcgt gaaaaaaag  attccctct taccaccaac ccactctttt tccccaccac ccactctct ctgctcagt  aagtatctgg aggaagaaaa cagtgaaaag aagaagtaaa aaccttttag tattagtatt  agaatgaagt caaactgtgc cacacatggt gaatgaaaa aaaaaaaaagg aggtgtgtt  ttgtcacaca gggcagtcac tcagcaccag agcactgat ggtctgagac tctcttagga  gcagagctct gccgcaatgg ccactgtggg atccacacct ggtctgaggg gcaactgagt  ctcggggaga agagcggccc tatgcctggt tagatgccc tgataaagaa catctgtcct  gtgaaagact caatgagctg ttatgttcta aacagggaag attcacatc caaacgagaa  aatcatgtaa acatgtgtct ttctgtaga gcataataa tggatgaggt tttgcaaaa  aaaaaanaa aaa</p>	Homo sapiens
49	635	Beta-1 adrenoceptor	NM_000684	<p>tgctaccgc gcccggtctt ctgggtgtgt ccccaaccac ggcccagccc tgccacacc A  cccgccccg gctccgcag ctggcatgg gcgcggggtg gctgctctg ggcgctccg  agcccggtaa cctgtctgctg gccgaccgc tccccgacgg gcggtccacc gcggtcgcc  tgctgtgccc cgcgtcgccc ccgcctctgt tgctgctcc cgcagcgaa agccccgagc  cgctgtctca gcagtggaca gcgggcatgg gtctgtgat ggcgtcatc gtgtgtctca  tcgtggcggg caatgtgctg gtgatctgg ccatcgcaa gacgctcggt ctgcagacgc</p>	Homo sapiens

50	635	Beta-1 adrenoceptor	NP_000675.1	<p> taccacacct cttcatcatg tccctggcca gcgccgacct ggtcatgggg ctgctgggtgg  tgccgttcgg ggcaccatc gtggtgtggg gccgtggga gtacggctcc ttcttctgcg  agctgtggac ctgagtggac gtgctgtgcg tgacggccag catcgagacc ctgtgtgtca  ttgccctgga ccgtacctc gccatcacct cgccttccg ctaccagacc ctgctgacgc  gcgcgcgggc gcggggccct gtgtgcaccg tgtgggacct ctgcggccctg gtgtccctcc  tgcccatcct catgactgg tggcgggcgg agagcgagca ggcgcgcgcg tgetacaacg  accccaagt ctgcgacttc gtcaccaacc gggcctacgc catcgccctcg tccgtagtct  ccttctacgt gccctgtgc atcatggcct tctgtacct gcgggtgttc cgcgaggccc  agaagcaggt gaagaagatc gacagtgcg agcgcggtt cctcggcggc ccagcgcggc  cgccctcgcc ctgcctcg ccgtcccg cgcgcgcgc gccgcgcgga cccgcgcgc  ccgcgcgcgc cgcgcacc gcccgctgg ccaacggcg tgcgggtaag cgcgcggccct  cgccctcgt ggcctacgc gacgaaggg cgtcaagac gctgggcac atcatggcg  tcttcacgt ctgctggctg ccttcttcc tggccaacgt ggtgaaggcc ttccaccgcg  agctgtgtcc cgaccgctc ttctgttct tcaactggct gggctacgcc aactcggcct  tcaaccccat catctactg cgcagcccg acttcgcaa ggccttccag ggaactgtct  gctgcgcgcg cagggtgct cgcgcgcgc acgcgacca cggagaccgg ccgcgcgcct  cgggtgtct ggcgcgcgc ggcgcgcgc catgcgcgc ggcgcctcg gacgacgacg  acgacgatgt cgtcggggc acgcgcgcgc cgcgcctgt ggcgcctgg gccggctgca  acggcggggc ggcgcggac agcactcga ccttgagca gccgtgcgc ccgggttcg  cctcggaac caaggtgtg ggcgcgcgc gggcgcgca ctcggggcac ggcctccca  gggaacgagg agatctgtg ttacttaaga cgcgtagcag gtgaactcga agccacaat  cctcgtctga atcatccgag gcaagagaa aagccacgga ccgttgaca aaaaggaag  tttgggaagg gatgggagag tggctgtg atgttcttg ttg </p>	Homo sapiens
51	640	Beta-2 adrenoceptor	NM_000024	<p> MGLMALIVL LIVAGNLVI VAIKTPRLQ TLNLFMSL ASADLVMLL VVPFGATIV  WGRWEYGSFF CELWTSVDVL CVTASITLC VIALDRYLAI TSPFQSL TRARGLVLC  TVWAI SALVS FLPILMHWR AESDEARRCY NDPKCCDFVT NRAYAIASSV VSFYVPLCIM  AFVYLRVFE AQKQVKIDS CERRFLGGPA RPPSPSPV PAPAPPPGP RPAANAATAP  LANGRAGRR PSRLVALREQ KALKTLGIIM GVFTLCWLPF FLANVVKAFH RELVPDRLEFV  FFNWLGYSNS AFNPILYCRS PDFKAFQGL LCCARRARR RHATHGDRPR ASGCLARPGP  PPSPGAASDD DDDVVGATP PARLLEPWAG CNGGAADSD SSLDEPCRP FASESKV  actgcgaagc ggtcttctca ggcacgggc tggaaactgg aggcaccgc agccctagc A  accgcacaag ctgagtgtgc aggcagagtc cccaccacac ccaccacaca gccgtgaat  gaggttcca ggcgtccgt cgcggccgc agagcccg cgtgggtccg ccgctgagg  cgccccagc cagtgcgctt acctgccaga cgcgcgcca tggggcaacc cgcgaacggc  agcgcctct tgcgggacc caatagaagc catgcgcgcg accacagct cagcagcaa  agggacgagg tgtgggtgtt ggcagtgcc atcgtcatgt ctctcatgt cctggccatc  gtgtttggca atgtgtgtt catcacagcc attgccaagt tcgagcgtct gcagcggtc  accaactact tcatcactc actggcctgt gctgatctgg tcatggcct ggcagtgggtg  ccctttgggg ccgcccata tcttatgaa atgtggact ttggcaact ctggtgcgag  ttttggactt ccattgatgt gctgtgcgtc acggccagca ttgagaccct gtgcgtgac </p>	Homo sapiens

52	640	Beta-2 adrenoceptor	NP_000015.1	<p>gcagtggatc gctactttgc cattacttca cttttcaagt accagagcct gctgaccaag  aataaggccc gggatgatcat tctgatgtg tggattgtgt caggccttac ctcttcttg  ccatttcaga tgcactggta cggggccacc caccaggaag ccatcaactg ctatgccaat  gagacctgct gtgactttctt caccgaacca gctatgcca ttgctcttcc catcgtgtcc  ttctacgttc ccttggtgat catggtcttc gtctactcca ggttctttca ggaggccaaa  aggcagctcc agaagattga caaatctgag ggcgcttcc atgtccagaa ccttagccag  gtggagcagg atggcgccac ggggcatgga ctccgcagat ctccaagt ctgcttgaag  gagcacaag cctcaagac gtaggcac atcatggga ctttccct ctgctggctg  cccttctca tcgttaacat tgtgcatgtg atccaggata acctcatccg taaggaaagt  tacatcctcc taaattggat aggtatgtc aattctgtt tcaatccct tatctactgc  cggagcccg atttcaggat tgccttccag gagcttctgt gcctgcgcag gtcttctttg  aaggcctatg ggaatggcta ctccagcaac ggcaacacag gggagcagag tggatatcac  gtggaacagg agaagaaaa taaactgctg tgtgaagacc tcccaggcac ggaagacttt  gtgggccatc aaggtactgt gcctagcgt aacattgatt caaaggag gaattgtagt  acaaatgact cactgctgta aagcagttt tctactttta agaccccc ccccccaac  agaacactaa acagactatt taactggag gataaaaa tagaataaaa ttgtaaaaa  tgtatagaga tatgcagaag gaaggcacc ctctgcctt ttttattttt ttaagctgta  aaaagagaga aaacttattt gagtgattat ttgttatttg tacagttcag ttctctttg  catggaattt gtaagtattt gtctaaagag ctttagtccct agaggacctg agtctgctat  attttcatga cttttccatg tatctacctc actattcaag tattaggggt aatatattgc  tgctggtaat ttgtatctga aggagatttt ccttccctaca ccttggact tgaggatttt  gagtatctcg gacctttcag ctgtgaacat ggactcttcc cccactctc ttatttgctc  acacggggtg ttttaggcag ggatttgag agcagcttca gttgttttcc cgagcaaaag  tctaaagttt acagtaata aatgtttga ccatg</p>	Homo sapiens
53	643	Beta-3 adrenoceptor	NM_000025	<p>FERLQTVNY FITSLACADL VMGLAVPFG AAHILMKWT FGNFCEFWT SIDVLCVTAS  IETLCVIAVD RYFAITSPFK YQSLITKKA RVIILMWIV SGLTSFLPIQ MHWYRATHQE  AINCYANETC CDEFTNQAYA IASSIVFYV PLVIMVFYS RVFQEAQRQL QKIDKSEGRF  HVQNLSQVEQ DGRTHGLRR SSKFCLKEHK ALKTLGIIMG TFTLCWLPIFF IWNIVHVIQD  NLIRKEVYIL LNWIGYVNSG FNPLIYCRSP DFRIAFQELL CLRRSLKAY GNGYSSNGNT  GEQSGYHVEQ EKENKLLCED LPGTEDFVGH QGTVPDNDID SQGRNCSTND SLL</p>	Homo sapiens



54	643	Beta-3 adrenoceptor	NP_000016.1	MAPWPHENSS LAIPWDLPTL APNTANTSGL PGVPWEAALA GALLALAVLA TVGNLLVIV P	Homo sapiens
				AIATWPRLO MTNVFTSLA AADLVMGLLV VPPAATLALT GHWPLGATGC ELWTSVDVLC	
				VTASIELTCA LAVDRYLA VNTNRYGALVT NPLRYGALVT KRCARTAVVL VWVSAVSVF APIMSQWVRV	
				GADAEARQCH SNPRCAFAS NMPYVLLSS VSFYLPFLVM LFVYARFVW ATRLRLRLRG	
				ELGRFPPEES PPAPSRSLAP APVGTCAPE GVPCAGRRPA RLPLREHRA LCTLGLIMGT	
				FTLCWLPPFL ANVLRALGSP SLVPGPAFLA LNWLGYNASA FNPLIYCRSP DFRSAFRRL	

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 ttac

55	688	Opsin, blue-sensitive	NM_001708	CRCGRRLPPE PCAARRPALF PSQVPAARSS PAQPRLCQRL DGASWGVVS	ggcatccatg agaaaaatgt cggaggaaga gttttatctg ttcaaaaata tctcttcagt A ggggccgtgg gatgggcctc agtaccacat tggccctgtc tgggccttct acctccaggc agctttcatg ggcactgtct tccttatagg gttccactc aatgccatgg tgcgtggtggc cacactgcgc tacaaaaagt tgcggcagcc cctcaactac attctggcca acgtgtcctt cggaggcttc ctctctgca tcttctctgt cttccctgtc ttctcgcca cgtgtaacgg atacttcgtc ttcggtcgcc atgtttgtgc tttggagggc ttctgggcca ctgtagcagg tctggttaca ggatggtcac tggccttctt ggcctttgag cgtacattg tcatctgtaa ggccttcggc aacttcgct tcagctccaa gcatgcactg acggtgttcc tggctacctg gaccattggg attggcgtct ccattccacc cttctttggc tggagccggg tcatccctga gggacctgag tgttccctgt gacctgactg gtacacctg ggcacaaaat accgcagcga gtcctatagc tggttctctt tcatcttctg cttcattgtg cctctctccc tcatctgctt ctcctacact cagctgctga gggccctgaa agctgttgca gctcagcagc aggagtcagc tacgacctag aaggctgaac gggaggtgag cgcgatgtg gttgtgatgg taggatcctt ctgtgtctgc tacgtgccct acgggcctt cgcgatgtac atggtaaca accgtaacca tgggctggac ttacggcttg tcaccattcc ttcattcttc tccaagagt cttgcatcta caatcccatc atctactgct tcatgaataa gcagttccaa gcttgcata tgaagatggg gtgtgggaag gccatgacag atgaatccga cacatgcagc tcccagaaa cagaagtctt tactgtctcg tctaccaag ttggcccaa ctgaggacc aatattggcc tgtttgcaac agtagaatt aaatttact t	Homo sapiens
56	688	Opsin, blue-sensitive	NP_001699.1	MRKMSEEEFY LFRNISSVGP WDGPQYHIAP VMAFYLOAAF MGTVELIGFP LNAMVLVATL P RYKKLRQPLN YILNVVSFGG FLICFVSFP VFVASCNGYF VFGRHVCALE GFLGTVAGLV TGWSLAFIAF ERYIVICKPF GNFRSSKHA LTVVLATWTI GIGVSIPPPF GWSRFIPEGL QCSGPDWYT VGTKYRSESY TWLFIFCFI VPLSLICFSY TQLLRALKAV AAQQQESATT QKAEREVSRM VVMVGSFCV CYVPYAAFAM YMVNNRNHGL DLRLVTIPSF FSKSACIYNP IIYCFMKNQF QACIMKMWCG KAMTDES DTC SSQKTEVSTV SSTQVGP	Homo sapiens	
57	692	Bombesin Receptor Subtype-3	NM_001727	gagtatctgg atgtcttggga ttttcttccc attctgttct gttctgttct cctaatacca A tctcgttact agacgtaggc attggacgtg acaatcaact gcatttgaac tgagaagaag aaatattaaa gacacagtct tcagaagaaa tggctcaaa ggcactcac tcacctaatc agactttaat ttcaatcaca aatgacacag aatcatcaag ctctgtggtt tctaacgata acacaaaataa aggatggagc ggggacaact ctccaggaat agaagcattg tgtgccatct atattactta tgcgtgtgac atttcagtg gcatccttg aaatgctatt ctcatcaaa tctttttcaa gacaaaatcc atgcaaacag ttccaaatat ttcatcacc agcctggctt ttggagatct ttacttctg ctaacttctg tggcagtgga tgeactcac taccttgcaag aaggatggct gttcggaaga attggttga aggtgtctc ttcatccgg ctcaactctg ttgggtgtgc agtgttcaca ttaacaattc tcagcgtga cagatacaag gcagttgtga agccactga gcgacagccc tccaatgcca tctggaagac ttgtgtaaaa gctggctgag tctggatcgt gtctatgata ttgtctctac ctgaggctat atttcaaat gtatacactt ttcgagatcc caataaaaa atgacatttg aatcatgtac ctcttacct gtctctaaga agctcttga agaaatacat tctctgtgtg gcttcttagt gttctacatt attccactct ctattatctc tgtctactat tcttggattg ctaggaccct ttcaaaaag accctgaaca	Homo sapiens	

58	692	Bombesin Receptor Subtype-3	NP_001718.1	<p> tacctactga ggaacaaagc catgcccgtga agcagattga atcccgaag agaattgcca  gaacgggtatt ggtgttggtg gctctgttg cctctgtgtg gtggccaaat caccctctgt  acctctacca ttcattcaact tctcaaacct atgtagacct cctggccatg catttcattt  tcaccatttt ctctcggtt ttggctttca gcaattcttg cgtaaacccc ttgtctctct  actggctgag caaaagcttc cagaagcaat ttaaagctca gtgtttctgt tgcaaggcgg  agcgccctga gctcctgtt gctgacacct ctcttaccac cctggctgtg atgggaacgg  tcccgggcac tgggagcata cagatgtctg aaattagtgt gacctcgttc actgggtgta  gtgtgaagca ggcagaggac agattctagc ttttcaagga aaatgctgc ttctctctcc  agcgtgtga tccgactcta agcgtgtgc agg </p>	Homo sapiens
59	729	CXC Chemokine Receptor 5	NM_001716	<p> GILGNAILIK VFFTKSMQT VPNIFFITSLA EGDLLLLLTC VPVDATHYLA EGWLFGRIGC  KVLSFIRLTS VGVSVFTLTI LSADRYKAVV KPLERQPSNA ILKTCVKAGC VMIVSMIFAL  PEAIFSNVYT FRDPNKNMTF ESCTSYPVSK KLLQEIHSLL CFLVFIIPL SIISVYYSLI  ARTLYKSTLN IPTEEQSHAR KQIESRKRIA RTVLVLVALF ALCWLPNHLL YLYHSFTSQT  YVDPSAMHFI FTIFSRVLAF SNSCVNPEAL YWLSKSFQKH FKAQLFCCKA ERPEPPVADT  SLTTLAVMGT VPGTGSIQMS EISVTSFTGC SVKQAEDRF </p>	Homo sapiens
59	729	CXC Chemokine Receptor 5	NM_001716	<p> gctgccacct ccttagaggc acctggcggg gagcctctca acataagaca gtgaccagtc A  tggtgactca cagcggcac agccatgaac taccgcgtaa cgctggaat ggacctcgag  aacctggagg acctgttctg ggaactggac agattggaca actataaga caccctccctg  gtggaaaatc atctctgccc tggcctacag gggccctca tggcctcctt caaggccgtg  ttcgtgcccc tggcctacag cctcatcttc ctctgggag tgatcggcaa cgtcctgggtg  ctggtgatcc tggagcggca cggcagaca cgcagttcca cggagacctt cctgttccac  ctggccgtgg cgcacctcct gctggtcttc atcttgccct ttgcccgtggc cgaggcctct  gtgggctggg tccctggggac ctctcctcgc aaaactgtga ttgcccgtga caaagtcaac  ttctactgca gcagcctgct cctggcctgc atgcctggtg accgtacct gccattgtc  cacgccgtcc atgcctaccg ccaccgcgc ctctctcca tccacatcac ctgtgggacc  atctggctgg tgggcttctt ccttgccctg ccagagattc tcttgccaa agtcagccaa  ggccatcaca acaactccct gccacgttg acccttctcc aagagaacca agcagaaacg  catgcctggt tcacctcccg attcctctac catgtggcg gattcctgct gccatgctg  gtgatgggt ggtgctacgt gggggtagt cacaggtgc gccaggccca gcggcgccct  cagcggcaga aggcagtcag ggtggccatc ctggtgacaa gcattctctt cctctgctgg  tcacctacc acatcgtcat ctctcctggac acctggcga ggctgaaggc cgtggacaat  acctgcaagc tgaatggctc tctccccgtg gccatcaca tgtgtgagtt cctgggacctg  gcccactgct gcctcaaccc catgctctac actttcgccg cgtgaaagt ccgcagtgac  ctgtcgccgc tccctgacgaa gctgggctgt accggccctg cctcctctg ccagctcttc  cctagctggc gcaggagcag tctctctgag tcagagaatg ccacctctct caccacgttc  taggtccag tgtcccttt tattgtgct tttccttgg gcaggcagtg atgtggatg  ctccttccaa caggagctgg gatcctaagg gctcaccgtg gctaagagtg tcttaggagt  atcctcattt ggggtagcta gaggaaccaa cccccattc tagaacatcc ctgccagctc  ttctgccgc cctggggcta ggctggagcc caggagcgg aaagcagctc aaaggcacag  tgaaggctgt ccttaacctat ctgcaccccc ctgggctgag agaacctcac gcacctccca </p>	Homo sapiens

60	729	CXC Chemokine Receptor 5	NP_001707.1	<p> tctaatacat ccaatgctca agaacaact tctacttctg cccttgccaa cggagagcgc  ctgccccctc cagaacacac tccatcagct taggggctgc tgacctccac agcttccccct  ctctccctct gccacactgt caaacaagc cagaagctga gcaccagggg atgagtggag  gttaaggctg aggaaggcc agctggcagc agagtgtggc cttcggacaa ctcagtccct  aaaaacacag acattctgcc aggcccccaa gcctgcagtc atcttgacca agcagggaagc  tcagactggt tgagttcagg tagctgcccc tggctctgac cgaacacagc ctgggtccac  cccatgtcac cggatcctgg gtggtctgca ggcagggtgc actctaggtg cccttgaggg  ccagccagtg acctgaggaa gcgtgaaggc cgagaagcaa gaaagaaacc cgacagaggg  aagaaaagag ctttcttccc gaaccocaa gaggagatg gatcaatcaa accggcggtt  ccctccgcc aggcgagatg ggggtgggtg gagaactcct aggttggtg ggtccagggg  atgggaggtt gtgggcattg atggggaagg aggtggtt gtccccct cactccctc  ccataagcta tagaccgag gaaactcaga gtcggaacgg agaaaggttg actggaaggg  gccgtggga gtcattctca ccatccctc cgtggcatca ccttaggcag ggaagtgtaa  gaaacacact gaggcagga agtccccagg cccaggaag ccgtgccctg cccccgtgag  gatgtcactc agatggaacc gcaggagct gtccgtgct tgtttgctca cctgggtgtg  gggaggcccc tccggcagtt ctgggtgctc cctaccact cccagcctt tgatcaggtg  gggagtacag gaccttgcc cttgtccac tcaagccaa gacccaaact ccttgggagg  ccccactgg gaaataacag ctgtggtcctc cgtgagatg tcttcacggc aggacaacga  ggaagcccta agacgtccct tttttctctg agtatctcct cgcaagctgg gtaatcgatg  gggaggtctg aagcagatgc aaagaggcaa gaggctggat ttggaatttt ctttttaata  aaaaggcacc tataaaacag gtcaatacag tacaggcagc acagagaccc ccggaacaag  cctaaaaatt gttcaaat aaaaaccaag aagatgtctt caaaaaaa aaaaaaaa  aaa </p>	Homo sapiens
61	735	C-C Chemokine Receptor 1	NM_001295	<p> ggcacgagcc cagaaacaaa gacttcacgg acaaaagtcc ttggaaccag agagaagccg A  ggatggaaac tcaaacacc acagaggact atgacacgac cacagagttt gactatgggg  atgcaactcc gtgccagaag gtgaacgaga gggcctttgg gggccaaactg ctgccccctc  tgtactcctt ggtattgtc attgggcctgg ttggaacat cctgggtggtc ctggtccttg  tgcaatacaa gaggtaaaa aacatgacca gcatctacct cctgaacctg gccatttctg  acctgctctt cctgttcacg cttcccttct ggtcgcacta caagtgaag gatgactggg  tttttggtga tgccatgtgt aagatcctct ctgggtttta ttacacaggc ttgtacagcg  agatcttttt catcatcctg ctgacgattg acaggtaact ggccatcgtc cagcccggtg  ttgccttgcg ggcaggacc gtcacttttg gtgtcatcac cagcatcatc atttggggcc  tggccatctt ggcttccatg ccaggcttat actttccaa gaccaaagg gaattcactc  accacacctg cagccttcac ttctctcac aaagcctacg agagtgaag ctgtttcagg </p>	Homo sapiens

62	735	C-C Chemokine Receptor 1	NP_001286.1	ctctgaaact gaacctctttt gggctgggtat tgccttttgtt ggtcatgac atctgtata caggattat aaagattctg ctaagacgac caaatgagaa gaaatccaaa gctgtccgtt tgatttttgt catcatgac atcttttttc tcttttgac cccctacaat ttgactatac ttatttttgt ttccaagac ttctgttca cccatgagt tgagcagagc agacatttgg acctggctgt gcaagtgcg gaggatgcg cctacacgca ctgctgtgtc aaccagtga tctacgctt cgttggtgag aggttccgga agtacctgcg gcagttgttc cacagcggtg tggtgtgca cctggttaaa tggctccctt tctctccgt ggacaggctg gaggggtca gctccacat tccctccaca ggggagcatg aactctctg cctgcccagg acactgagcc agcagcctgg aggaggccaa cccaaaataa gcaggcgtga cctgcccagg acactgagcc agcagcctgg ctctcccagc caggttctga ctctggcac agcatggagt cacagccact tggatagag agggaatga atggtggcct ggggcttctg aggttcttg ggcttcagtc tttccatga acttctccc tggtagaaag aagatgaatg agcaaaacca aatattccag agactgggac taagtacc agagaaggc ttggactcaa gcaagatttc agatttgtga ccttagcat ttgtcaaca agtcacccac ttccactat tgcttgaca aaccaattaa acccagtagt ggtgactgt ggtccattc aaagtgagct cctaaagccat gggagacact gatgtatgag gaatttctgt tcttccatca cctccccccc cccgccacc tcccactgcc aagaacttg aaatagtgt ttccacagt actccactt gagtcccaga gccaatcagt agccagcatc tgctccctt tcaactccac cgcaggattt gggctcttg aatcctggg aacatagaac tcatcacgga agagttaga cctaacgaga aatagaaatg ggggaactac tgctggcagt ggaactaaga agcccttag gaagaatttt tatatccact aaatcaaac aattcaggga gtgggtaag cacggccat atgaataaca tgggtgctt cttaaaatag cctaaaggg gaggactca tcaattccat ttacccttct tttctgacta ttttcagaa tctctctct ttcaagttg ggtgatagt tggtagattc taatggctt attgcagcga ttaataacag gcaaaaggaa gcagggttg gttccgact ccatcttga cttgtcagca aaaaaaaa aaaaa atgggtcaga gttccgact gttccgact ccatcttga cttgtcagca aaaaaaaa aaaaa METPNTEDY DTTTFDYGD ATPCQKNER AFGAQLPL YSLVFVIGLV GNILVVLV P QYKRLKNMTS IYLLNLAISD LLFLTLFW IDYKLKDDW FGDAMCKILS GFYTGLYSE IFFIILLTID RYLAIVHAVF ALRARTVTFG VITSIIIAL AILASMPGLY FSKTQWETH HTCSLHPHE SLREWKLFQA LKINLFLVL PLLVMIICYT GIILKILRRP NEKSKAVRL IFVIMLIFFL FWTPYNLTIL ISVFQDFLFT HECEQSRHLD LAVQVTEVIA YTHCCVNPVI YAFVGERFRK YLRQLFHRV AVHLVKWLPF LSVDRLEKRV STSPSTGEHE LSAGF 737	63	737	C-C Chemokine Receptor 3	NM_001837	ttttctctt tctatcacag ggagaagtga aatgacaacc tcaatagata cagttgagac A ctttgtacc acatcctact atgatgagct gggcctgctc tgtgaaaaag ctgataccag agcactgat gccagtttg tgccccgct gtaactccctg gtgttcactg tggcctctt gggcaatgt gtgggtgga tgatcctcat aaaatacagg aggtccgaa ttatgaccaa catctacctg ctcaacctg ccatttcgga cctgctcttc ctcgtcacc ttccattctg gatccactat gtcagggggc ataactgggt ttttggccat ggcatgtga agctcctctc agggttttat cacacaggct tgtacagcga gatcttttc ataactctgc tgacaatcga caggtacctg gccattgtcc atgctgtgtt tgccttcga gccgggactg tcaactttgg tgtcatcacc agcatcgtca cctggggcct ggcagtgtga gcagctcttc ctgaattat cttctatgag actgaagagt tgtttgaaga gactcttctg agtgcctctt acccagagga	Homo sapiens	Homo sapiens
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64	737	C-C Chemokine Receptor 3	NP_001828.1	<p>           TTTSLDTVET FGTTSYYDDV GLLCEKADTR ALMAQFVPL YSLVFTVGLL GNVVVVMILI P            KYRRLRIMTN IYLLNLAISD LLFLVTLPEW IHVVRGHNWV FGHGMCKLLS GFYHTGLYSE            IFFIILLTID RYLAIVHAVF ALRARTVTFG VITSIVTWGL AVLAALPEFI FYETEELFEE            TLCSALYPED TVYSWRHEHT LRMTIFCLVL PLLVMAICYT GIITLLRCP SKKYYKAIRL            IFVIMAVFFI FWTPYNVAIL LSSYQSILFG NDCERSKHLN LVMLVTEVIA YSHCCMNPVI            YAFVGERFRK YLRHFFHRHL LMHLGRYIPF LPSEKLETS SVSPSTAEPE LSIVF            cgggggtttt gatctttctt cctttcttct cctttcttct cttcccttct tctttcttct cctccctccc A            tcttccattt cctttcttct tcttccctcag tctccacatt caacattgac aagtccattc            agaaaaagcaa gctgcttctg gttgggcccc gacctgctt gaggagcctg tagagttaaa            aaatgaaccc caccgatata gcagatacca cctctcgata agcatatata agcaattact            atctgtatga aagtatcccc aagccttgca ccaagaagag catcaaggca tttggggagc            tcttccctgccc cccactgtat tcttgggttt ttgtatttgg tctgcttggg aattctgtgg            tggttctggt cctgttcaaa tacaagcggc tcagggtccat gactgatgtg taccgtctca            accttgccat ctgggatctg ctctctgtgt tttccctccc tttttggggc tactatgcag            cagaccagt ggtttttggg ctaggctctg gcaagatgat ttcctggatg tacttgggtgg            gctttttacag tggcatattc tttgtcatgc tcatgagcat tgatagatag ctggcgatag            tgcacgcggt gttttccttg agggcaagga ccttgactta tggggtcatc accagtttgg            ctacatggtc agtggtgtg ttcgctccc ttcctgggtt tctgttcagc acttgttata            ctgagcgcaa ccatacctac tgcataacca agtactctct caactccacg acgtggaagg            ttctcagctc cctggaatc aacattctctg gattggtgat ccccttaggg atcatgctgt            ttgtactc catgatcatc agaaccttgc agcattgtaa aaatgagaag aagaacaagg            cggggaagat gatctttgccc gttgtgggtcc tcttccctgg gttctggaca ccttacaaca            tagtgcctt cctagagacc ctggtggagc tagaagtcc tcaaggactgc acccttgaaa            gatacttggg ctatgccatc caggccacag aaactctggc ttttggttcac tgcgtcctta            atcccatcat ctactttttt ctggggggaga aatttcgcaa gtacatccta cagcttctca            aaacctgcag gggccttttt gtgctctgccc aatactgtgg gctcctccaa atttactctg            ctgacacccc cagctcatct tacacgcagt ccaccatgga tcatgatctt catgatgctc            tgtagggaaaa atgaaatggt gaaatgcaga gtcaatgaac ttttccacat tcagagctta            ctttaaaatt ggtattttta ggttaagagat cctgagcca gtgtcaggag gaaggttac            acccacagt gaaagacagc ttctcatcct gcaggcagct ttttctctcc cactagacaa         </p>	Homo sapiens
65	738	C-C Chemokine Receptor 4	NM_005508	<p>           cctctgtat agctggaggc atttccacac tctgagaatg accatcttct gtctcgttct            cctctgtc gtatggcca tctgtacac agaatcatc aaaacgtgc tgaagtccc            cagtaaaaaa aagtacaagg ccatcgggt cattttgtc atcatggcg tgttttcat            tttctggaca cctacaatg tggctatcct tctctctcc tatcaatcca tcttattgg            aaatgactgt gagcggagca agcatctgga cctggtcatg ctggtgacag aggtgatcgc            ctactccac tgctgcatga acccgtgat ctacgcttt gtggagaga ggttccggaa            gtacctgcg cacttcttc acaggcactt gctcatgcac ctgggcagat acatcccatt            ccttcctagt gagaagctgg aaagaaccag ctctgtctc ccatccacag cagagcggga            actctctatt gtgttttagg tcagatgcag aaattgcct aaagaggag gaccaaggag            atgaagcaaa cacattaagc cttccacact cacctctaaa acagtcttc aaacttccag         </p>	Homo sapiens

66	738	C-C	Chemokine Receptor 4	NP_005499.1	gtccagcctg gcaagggttc acctgggctg aggcacacct cctcacacca ggcttgctg caggcatgag tcagtcctgat gagaactctg agcagtgcct gaatgaagtt gtaggtaata ttgcaaggca aagactattc ccttctaacc tgaactgatg ggtttctcca gaggaattg cagagtactg gctgattgag taaatcgta ccttttgctg tggcaaatgg gcccccg MNPTDIADTT LDESIYSNY LYESIPKPT KEGIKAFGEL FLPLYSLVF VFGLLGNVV P VLVLFKYKRL RMTDVYLLN LAISDLLVF SLPFWGYAA DQWVFLGLC KMISWMLVG FYSGIFFVML MSIDRYLAIV HAVFSLRAT LTYGVITSLA TWSVAVFASL PGFLFSTCYT ERNHTYCKTK YSLNSTWKV LSSLEINILG LVIPLGIMLF CYSMIIRTLO HCKNEKNKA VKMIFAVVVL FLGFWTPYNI VLFLETLVEL EVLQDCTFER YLDYAIQATE TIAFVHCCLN PIIYFFLGEK FRKYILQLFK TCRGLFVLCQ YGGLLIQISA DTPSSSYTQS TMDHDLHDAL gtgagacagg gtagtgcgga ggcggggcac agccttctcg tgtggtttta ccgcccagag A agcgtcatgg acctggggaa accaatgaaa agcgtgctgg tgggtgctct ccttgcatt ttccaggat gccgtgtgca agatgaggtc acggacgatt acatcggaga caacaccaca gtggactaca ctttgttga cttccatcatt tgtttcgtgg gccactggg caatgggctg tggttcctcc ctatcatgta cttccatcatt tgtttcgtgg gccactggg caatgggctg gtcgtgttga cctatatcta tttcaagagg ctcaagacca tgaccgatac ctacctgtc aacctggcgg tggcagacat cctcttctc ctgaccttc ccttctggc ctacagcgg gccaaagtcct ggttcttcgg tgtccacttt tgcaagctca tctttgcat ctacaagatg agcttcttca gtggcatgct cctacttctt tgcatcagca ttgaccgcta cgtggccatc gtccaggctg tctcagctca ccgccacct agccacagt cctccatcag caagctgtcc tgtgtgggca tctggatact agccacagt cctccatcag cagagctcct gtacagtgc ctccagagga gcagcagtg gcaagcagt cgtgctctc tcatacaga gcatgtggag gcccttatca ccaccaggt ccatccaggt gccacggc acctgctcc aggcacgcaa ctttgagcgc atgagcttct gttaccttgt ccatccaggt ccatccaggt acctgctcc aggcacgcaa ctttgagcgc aacaaggcca tcaaggctgt catcgtctgt ccatccaggt acctgctcc aggcacgcaa ctttgagcgc tacaatgggg tggctcctgg ccagacgggt gccacttca acatcaccag tagcacctgt gagctcagta agcaactcaa catcgctac gacgtcact acagcctggc ctgctcgcg tgctgcgtca accttctt gtacgcctt atcggcgtca agtccgcaa cgtctcttc aagctcttca aggacctggg ctgcctcag caggagcag tccggcagt gtttctctgt cggcacatcc ggcgtctct catgagtgt gaggccgaga ccaccaccac ctttctccca taggcgactc tctgcctgg actagagga cctctccag ggtccctggg gtgggtag ggagcagatg caatgactca ggacatcccc ccgccaaaag ctgctcaggg aaaagcagct ctccccctcag agtgcaagcc ctgctccaga agttagcttc acccaatcc cagctacctc aaccaatgcc gaaaagaca gggctgataa gctaaccaca gacagacaac actgggaaac agaggctatt gtccccataa ccaaaaactg aaagtgaag tccagaaact gttccacct gctggagtga aggggccaag gaggtgagt gcaaggggag tgggagtggt ctgaagagtc ctctgaatga accttctgg cttccacaga ctcaaatgct cagaccagct cttccgaaaa ccaggcctta tctccaagac cagagatagt ggggagactt cttggcttgg tgaggaag cggacatcag ctggtcaaac aaactctctg aacctctcc tccatctt tcttactgt cctccaagcc agcgggaatg gcagctgcca cgcggccta aaagcact catccccca cttgccgcgt cgcctccca ggtctctaac aggggagagt gtggtgttct ctgcaggcca	Homo sapiens
67	741	C-C	Chemokine Receptor 7	NM_001838	gtgagacagg gtagtgcgga ggcggggcac agccttctcg tgtggtttta ccgcccagag A agcgtcatgg acctggggaa accaatgaaa agcgtgctgg tgggtgctct ccttgcatt ttccaggat gccgtgtgca agatgaggtc acggacgatt acatcggaga caacaccaca gtggactaca ctttgttga cttccatcatt tgtttcgtgg gccactggg caatgggctg tggttcctcc ctatcatgta cttccatcatt tgtttcgtgg gccactggg caatgggctg gtcgtgttga cctatatcta tttcaagagg ctcaagacca tgaccgatac ctacctgtc aacctggcgg tggcagacat cctcttctc ctgaccttc ccttctggc ctacagcgg gccaaagtcct ggttcttcgg tgtccacttt tgcaagctca tctttgcat ctacaagatg agcttcttca gtggcatgct cctacttctt tgcatcagca ttgaccgcta cgtggccatc gtccaggctg tctcagctca ccgccacct agccacagt cctccatcag caagctgtcc tgtgtgggca tctggatact agccacagt cctccatcag cagagctcct gtacagtgc ctccagagga gcagcagtg gcaagcagt cgtgctctc tcatacaga gcatgtggag gcccttatca ccaccaggt ccatccaggt gccacggc acctgctcc aggcacgcaa ctttgagcgc atgagcttct gttaccttgt ccatccaggt ccatccaggt acctgctcc aggcacgcaa ctttgagcgc aacaaggcca tcaaggctgt catcgtctgt ccatccaggt acctgctcc aggcacgcaa ctttgagcgc tacaatgggg tggctcctgg ccagacgggt gccacttca acatcaccag tagcacctgt gagctcagta agcaactcaa catcgctac gacgtcact acagcctggc ctgctcgcg tgctgcgtca accttctt gtacgcctt atcggcgtca agtccgcaa cgtctcttc aagctcttca aggacctggg ctgcctcag caggagcag tccggcagt gtttctctgt cggcacatcc ggcgtctct catgagtgt gaggccgaga ccaccaccac ctttctccca taggcgactc tctgcctgg actagagga cctctccag ggtccctggg gtgggtag ggagcagatg caatgactca ggacatcccc ccgccaaaag ctgctcaggg aaaagcagct ctccccctcag agtgcaagcc ctgctccaga agttagcttc acccaatcc cagctacctc aaccaatgcc gaaaagaca gggctgataa gctaaccaca gacagacaac actgggaaac agaggctatt gtccccataa ccaaaaactg aaagtgaag tccagaaact gttccacct gctggagtga aggggccaag gaggtgagt gcaaggggag tgggagtggt ctgaagagtc ctctgaatga accttctgg cttccacaga ctcaaatgct cagaccagct cttccgaaaa ccaggcctta tctccaagac cagagatagt ggggagactt cttggcttgg tgaggaag cggacatcag ctggtcaaac aaactctctg aacctctcc tccatctt tcttactgt cctccaagcc agcgggaatg gcagctgcca cgcggccta aaagcact catccccca cttgccgcgt cgcctccca ggtctctaac aggggagagt gtggtgttct ctgcaggcca	Homo sapiens

68	741	C-C Chemokine Receptor 7	NP_001829.1	<p>ggcagctgc ctccgctga tcaaagccac actctgggct ccagagtggg gatgacatgc  actcagctct tggctccact gggatgggag gagaggacaa gggaaatgtc agggcgggg  aggtgacag tggccgcca aggccacgag ctgttctttt gttctttgtc acagggactg  aaaacctctc ctcatgttct gctttcgatt cgttaagaga gcaacatttt acccacacac  agataaaagt tcccttgag gaacaacacag ctttaaaa</p> <p>MDLGKPMKSV LVVALIVFQ VCLQDEVD DYIGNTTVD YTLFESLCSK KDVRNFKAWF P  LPIMYSIICF VGLLNGLVV LTIYFKRLK TMTDFYLLNL AVADILFLT LPFWAYSAAK  SWVGVHFECK LIFAIYKMSF FSGMLLLLCI SIDRYVAIVQ AVSAHRHRAR VLLISKLSKV  GIWILATVLS IPELLYSDLQ RSSEQAMRC SLITEHVEAF ITIQVAQMVI GFLVPLLLAMS  FCYLVIIRTL LQARNFERNK AIKVIIAVV VFIVFQLPYN GVLAQTVAN FNITSSTCEL  SKQLNIAYDV TYSLACVRCC VNPFLYAFIG VKFRNDLFKL FKDLGLCSQE QLRQWSSCRH  IRSSMSVEA ETTTTFSP</p>	Homo sapiens
69	742	C-C Chemokine Receptor 8	AI733823	<p>TTTAAATTTA AAAACTTTAT TGAATAGCA TGTAGCAGC AGTGAACAGG GCATGGCACA A  GAAGGTTTC AAAACAAGT TAGCATGAAG GATGCCATAT GCTGTTGCCA ACAACTAGAA  CACGGTGACT AAAGACACAG TTCTGAATGT CCAGCACAAAC CTCTGGCCTG CAACATATGTT  CAGTGATGAT GATAAACAAAG GTGGTGACTT GGAAGGAATC CCTATGTCAA GTGAGAAAAA  AAATGATGTT CTGACCTCCT TATATATGTA AAAATATATAC CTTACAGATC CGTCAGTAAG  CTGGAAGAAG TGGATGTTGA AGTTTTTAAC ATCAGATGAT GGTCTCCAGT TGTTTCATCAA  CCCATGGTGA AATAGTTGAA CGGTTCTGAA TCAAAGGTGA TCCTAATAGT GAAGACATTA  ACATTGCAGA AAAAGTGCCT ACAGATTATA TGGTGAAAAT ACGTGATGGG CTTCTTGAAG  GACTAGAGCA GTGTGTATTC AAACAGAAC AAGAAATCAC GTCAGTTTAT</p> <p>TGCCAATAT GCTGTTGCCA ACACCTAGAA CACATGACT GGAGACACAG TTGTGCGTGC A  CTGGCACAAC CTCCAGCCTG TGCTATGTT CAGTGATGAT GATGAGCAAG GTGGTGACTT  TGAAGGATTT TGTATATCAA GTGAAAAGAA ATGATATCTG ACCTCCTTAC ATATCTAAAA  CATATACCTT CAAAATCCAT CAATAAGCTG AAAGAAATAG ATATCAAAGA ATATTTTAAC  ATCATTAATG AGGCTCCAGT TATTCATTCA TTGACCAATG GTAATATAGC TGAATGATT  CTGAATCAAG CTGATTATGA TAATAGTGAT GATGAAGATG ATGTTAATAC TGCAGAAAAA  GTGCCTATAA ATGACACACAGT GAAAA</p>	Homo sapiens
70	742	C-C Chemokine Receptor 8	IG6770	<p>ctccagagag gctgctgctc attgagctgc actcacatga ggatacacag tttgtgaaga A  aggaattggc aacactgaaa cctccagaac aaaggctgtc actaaggctc cgctgccttg  atggattata cacttgacct cagtggtgaca acagtgaccg actactacta ccctgatatac  ttctcaagcc cctgtgatgc ggaacttatt cagacaaatg gcaagttgct ccttgctgtc  ttttattgcc tctgtttgtt attcagtcct ctgggaaaca gcctgggtcat cctgggtcctt  gtggtctgca agaagctgag gagcatcaca gatgtatacc tcttgaacct ggcctgtctt  gacctgcttt ttgtctctc ctctcccttt cagacctact atctgctgga ccagtgggtg  tttgggactg taatgtgcaa agtgggtgtct ggccttttatt acattggctt ctacagcagc  atgtttttca tcacctcat gagtgtggac aggtacctgg ctgttgtcca tggcgtgtat  gcctaaagg tgaggacgat caggatgggc acaacgctgt gcctggcagt atggctaacc  gccattatgg ctaccatccc attgctagt tttaccacaa tggcctctga agatgggtgtt  ctacagtggt attcatttta caatcaacag actttgaagt ggaagatctt caccacactc  aaatgaaca ttttaggctt gttgatccca ttcaccatct ttatgttctg ctacattaaa</p>	Homo sapiens
71	742	C-C Chemokine Receptor 8	NM_005201		Homo sapiens



72	C-C Chemokine Receptor 8	NP_005192.1	<p>atcctgcacc agctgaagag gtgtcaaaac cacaacaaga ccaaggccat caggttggtg</p> <p>ctcattgtgg tcattgcac tttacttttc tgggtcccat tcaacgtggt tcttttccct</p> <p>acttccttgc acagtatgca catcttggat ggatgtagca taagccaaca gctgacttat</p> <p>gccaccatg tcacagaaat catttctttt actcactgct gtgtgaaccc tgttatctat</p> <p>gcttttgttg gggagaagtt caagaaacac ctctcagaaa tatttcagaa aagttgcagc</p> <p>caaatcttca actacctagg aagacaaatg cctaggaga gctgtgaaaa gtcacatccc</p> <p>tgccagcagc actcctccc ttcctccagc gttagctaca ttttgtgagg atcaatgaag</p> <p>actaaatata aaaaacattt tcttgaatgg catgctagta gcagtgaagca aaggtgtggg</p> <p>tgtgaaaggt ttccaaaaaa agttcagcat gaaggatgcc atatatgttg ttgccaaacac</p> <p>ttaaaacaca atgactggag acatagtgtt aacaagtgtt aactttaag gattctgtat gccaaagtga</p> <p>tgtgtttatt gatgatgttg aacaaagtgt cttcatatgc aaaaatatac cttcagagac gtgcagtagg</p> <p>aaaaaaagat gtctgacctc agttttgaca tcaatgatga ggtcccagtt gtctatgcat</p> <p>ctggaagaag tggatatgga agtttgata ggaagtgttc tgaatcaagg tgattgtgat tatatgaca</p> <p>atgaagatga tgcattaat actgcataaa aagtgccctg agatgacatg gtgaaaaatat</p> <p>ttgacaggct tatggaagga ctacagcagc acgattcat aacagaacaa gaaattatct</p> <p>cagcttataa aatcaaacag agacttctag acaaaaacca ttgttgatga ggcagatgcc</p> <p>tctagaagag acgtttaaaa gccatcaaac acaatgcctc atcttccctg gaggaccac</p> <p>ttcctgatcc ctcaactgtg tctgatgttt cttctcatgt aagaaataaa aaataaaaaat</p> <p>aaaaaaatat atattggatg gtaactacag gaaaaataa aaaaatatat agtggacagt</p> <p>aacctttcaa tcaaaactca gtatcataag tagagactga aaacttgccg ttattgattg</p> <p>ttgttattaa cagctgatac aggtattctg ctgatgctac tgctgcctag ttaccatgaa</p> <p>caggtttttt cactattaat ggtgcgtcat attttttact tttaaagtact tacgtgtgag</p> <p>taagtgaag aaaaatgattg cttatcagta gtatcaatga tttactcaat atctgaatca</p> <p>ccttgattca gaaccatttc agctgtttca ccacagatca atgaataaca gcctcattga</p> <p>tgtaaaaaac ttcaatatcc acttctttca gcctactgta gactctgga gtatactttt</p> <p>tgcatatgta aggaagtcag atttttttt</p>	Homo sapiens
73	CXC Chemokine Receptor 3	NM_001504	<p>MDYTLDSVT TVTDYYYPD I FSPCDAL I QTNKLLLV FYCLLFVFS L LGNSLVILV L P</p> <p>VCKKLRIT DVYLLNLS DLLFVSFPF QTYLLDQV FGTVMCKWS GFYIIGFYSS</p> <p>MFITLMSVD RYLAHVAVY ALKVRIRMG TTLCLAVWLT AIMATIPLLV FYQVASEDGV</p> <p>LQYSFYNQ TLKWKIFTN KMNILGLIP FTIFMFCYK ILHLKRCQN HNKTALRLV</p> <p>LIVIASLLF WPFNVVLF TSLHSMHLD GCSISQQLTY ATHVTEIISF THCCVNPVY</p> <p>AFVGEKFKKH ISEIFQKSCS QIFNVLGRQM PRECEKSSS CQHSRRSSS VDYL</p> <p>ccaaccaca gcaccaagc agaggggcag gcagcacacc acccagcagc cagagacca A</p> <p>gccagccat ggtccttgag gtgagtgacc accaagtgtt aaatgacgc gaggtgccc</p> <p>ccctcctgga gaacttcagc tcttctatg actatggaga aaacgagagt gactcgtgct</p> <p>gtacctccc gccctgcca caggacttca gctgaaactt cgaccgggccc ttcctgcccag</p> <p>ccctctacag cctcctcttt ctgctggggc tgcctgggcaa cggcgcggtg gcagccgtgc</p> <p>tgctgagccg gcggacagcc ctgagcagca ccgacacctt cctgctccac ctactgttag</p> <p>cagacacgct gctggtgctg acactgccgc tctgggcagt ggacgctgcc gtccagtggg</p> <p>tctttggctc tggcctctgc aaagtggcag gtgcctctt caacatcaac ttctacgacg</p>	Homo sapiens

113/448

74	752	CXC Chemokine Receptor 3	NP_001495.1	<p>gagccctct gctggcctgc atcagctttg accgtacct gaacatagtt catgccaccc  agctctaccg cggggggccc cggcccgcg tgacctcac ctgcctggct gtctgggggc  tctgctgct tttcgccctc ccagacttca tcttctgtc gggccaccac gacgagcgcc  tcaacgccac ccaactgcaa tacaacttcc cacaggtggg ccgacaggtc ctgcggtgctg  tgacagtggg ggtggctttt ctgctgccc tgctggtcat ggctactgc tatgcccaca  tcctggccgt gctgctggtt tccaggggcc agcgcgccct gggggccatg cggctggtgg  tggtggctgt ggtggccttt gcctctgct ggaccccta tcacctggtg gtgctggtgg  acatcctcat ggacctgggc gcttggccc gcaactgtgg ccgagaaagc agggtagacg  tggccaagtc ggtcacctca ggcctgggct acatgcactg ctgctctaac ccgtgctct  atgctttgt aggggtcaag ttccgggagc gcatgtggat gctgctcttg cgcctgggct  gcccacaaca gagaggctc cagaggcagc catcgtcttc cgcggggat tcactctggt  ctgagacctc agaggcctcc tactgggct tgtgaggcgg gaatccgggc tccctttcg  ccacagctc gacttccccg cattccaggc tctctctcc ctctggcggc tctgctctc  cccaatatcc tgcctccccg gactcactgg cagccccagc accaccaggt ctcccgggaa  gccacctcc cagctctgag gactgcacca ttgctgctcc ttactgtgcca agccccatcc  tgccgcccga ggtggctgcc tggagcccca ctgccccttc catttgaaa ctaaaacttc  atcttcccc agtgcgggga gtacaaggca tggcgtagag ggtgctgccc catgaagcca  cagcccgagc ctccagctca gcagtactg tggccatggt ccccaagacc tctatatgtg  ctctttatt tttatgtcta aaatcctgct taaaacttt caataaaca gatcgtcagg  accaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa</p>	Homo sapiens
75	753	CXC Chemokine Receptor 4	NM_003467	<p>gtttgttggc tgcggcagca ggtagcaaa gtagccgag ggctgagtg ctccagtagc A  caccgcatct ggagaaccag cggttaccat ggaggggatc agtatataca ctccagataa  ctacaccgag gaaatgggct caggggacta tgactccatg aaggaaccct gtttccgtga  agaaaaatgct aatttcaata aaatcttct gccaccatc tactccatca tcttctaac  tggcattgtg ggcaatggat tggctatctt ggtcatgggt taccagaaga aactgagaag  catgacggac aagtacaggc tgcacctgtc agtgggccag ctctcttttg tcatcagct  tcccttctgg gcagttgatg ccgtggcaaa ctggtacttt gggaacttcc tatgcaaggc  agtccatgtc atctacacag tcaacctcta cagcagtgct ctcatcctgg ccttcatcag  tctggaccgc tacctggcca tgcgtccagc caccacagt cagaggccaa ggaagctgtt  ggctgaaaag gtggtctatg ttggcgctctg gatccctgcc ctctgctga ctattccga  cttcatcttt gccaacgtca gtgaggcaga tgacagatat atctgtgacc gcttctacc  caatgacttg tgggtggttg tgttccagtt tcagcacatc atggttggcc ttatcctgcc  tggtattgtc atctgtcct gctattgcat tatcatctcc aagctgtcac actccaaggg  ccaccagaag cgaaggccc tcaagaccac agtcatctc atctggctt tcttgcctg</p>	Homo sapiens

76	753	CXC Chemokine Receptor 4	NP_003458.1	ttggctgcct tactacattg ggtacagcat cgactccttc atctcctctgg aaatcatcaa gcaagggtgt gagtttgaga aactgtgca caagtggatt tccatcacgg aggccttagc tttcttccac tgttgtctga acccaccct ctatgcttcc ctggagcca aatttaaac ctctgccag cagcactca cctctgtgag cagagggctc agcctcaaga tctctccaa aggaagcga ggtggacatt catctgttcc cactgagct gagtcttcaa gtttccactc cagctaacc agatgtaaaa gactttttt tatacgataa ataactttt ttttaagtac acatttttca gatataaaag actgaccaat atgtacagt ttttattgct tgttggattt ttgtcttggt tttctttagt ttttgtgaag ttaattgac ttattatat aaatttttt tgtttccatat tgatgtgtgt ctaggcagga cctgtggcca agttcttagt tgctgtatgt ctctggtgag gactgtagaa aagggaaactg aacattccag agcgtgtagt gaatcacgta aagctagaaa tgatcccccag ctgtttatgc atagataatc tctccattcc cgtggaacgt tttctctgtt cttaaagactg gattttgtg tagaagatgg cactataaac caaagcccaa agtggtagag aaatgctggt ttttcagttt tcaggagtggt gttgatttca gcacctacag tgtacagctc tgtattaaagt tgttaataaa agtacaatgtt aaacttactt agtgttatg MEGISITYSD NYTEEMGSGD YDSMKPCFR EENANFNKIF LPTIYSIIFL TGIVGNGLVI P LVMGYQKKLR SMTDKYRLHL SVADLLFVIT LPFWAVDAVA NWYFGNFLCK AVHVIYTVNL YSSVLILAFI SLDRYLAIVH ATNSQRPRL LAEKWVYGV WIPALLLTIP DFIFANVSEA DDRYICDRFY PNDLWVWFQ FQHIMVGLIL PGIVILSCYC IISKLHSHK GHQKRKALKT TVILILAFFA CWLPYYIGIS IDSFILLEII KQCEFEFNTV HKWISITEAL AFFHCCLNPI LYAFLGAKFK TSAQHALLTSV SRGSSLKILS KGRGGHSSV STESSESSFH SS Homo sapiens
77	755	Complement Component 3a Receptor 1	NM_004054	atggcgctct tctctgctga gaccaattca actgacctac tctcacagcc atggaatgag A ccccagtaa ttctctccat ggtcattctc agccttactt ttttactggg attgccaggc aatgggctgg tgcgtgtgggt ggctggcctg aagatgcagc ggacagtga cacaatttgg ttctccacc tcaacttggc ggacctctc tgctgctct ccttgccctt ctgctggct cacttggctc tccagggaca gtggccctac ggcaggttcc tatgcaagct catccctcc atcattgtcc tcaacatgtt tgccagtgtc ttctgtta ctgccattag cctggatcgc tgtcttgggt tattcaagcc aatctgggtg cagaatcctc gcaatgtagg gatggcctgc tctatctgtg gatgtatctg ggtgggtggct ttgtgtagt gcatctctgt gttcgtgtac cgggaaatct tcactacaga caaccataat agatgtggct acaaatgttg tctctccagc tcattagatt atccagactt ttatggagat ccactagaaa acaggtctct tgaataacatt gttcagccgc ctggagaaat gaatgatagg ttatgcctt cctctttcca acaaatgat catccttga cagtcctcac tgtcttccaa cctcaaacat ttcaagacc ttctgcagat tcaactccca ggggttctgc taggttaaca agtcaaaaatc tgtattctaa tgtatttaa cctgtgatg tggctcacc taaaatcccc agtgggttct ctattgaaga tcacgaaacc agccactgg ataatctga tgcctttctc tctactcatt taaagctgtt ccttagcgt tctagcaatt ccttctacga gtctgagcta ccacaaggtt tccaggatta ttacaattta ggccaattca cagatgacga tcaagtcca acaccctcg tggcaataac gatcactagg ctagtgggtg gtttctgtc gccctctgtt atcatgatag cctgttacag ctctattgtc ttccgaatgc aaaggggccc cttcgccaag tctcagagca aaaccttctg agtggccgtg gtgggtgggt ctgtctttct tgtctgctgg actccatacc acatttttg agtcctgtca ttgcttactg acccagaaac tcccttgggg aaaactctga tgcctctggga tcatgtatgc Homo sapiens

78	755	Complement Component 3a Receptor 1	NP_004045.1	MASFSAETNS FLHLTLADLL CLVFEKPIWC SLDYPDFYGD SLPRGSARLT SSNSFYESEL FRMQRGFEAK IALASANSCE TV	TDLISQPWNE CCLSLPFSLA QNRHNVGMAC PLENRSLENI SQNLYSNVFK PQGFQDYYNL SQSKTERVAV NPFLYALLGK	PPVILSMVIL HLALQGQWPY SICGCIWVA VQPPGEMNDR PADVSPKIP GQFTDDQVP VVAVFLVCW DFRKKARQSI	SLTFLGLPG GRFLCKLIPS FVWCIPVFVY LDPSSFQTNL SGFPIEDHET TPLVAITITR TPYHIFGVLS QGILEAAFSE	NGLVLWVAGL IIVLNMFASV REIFTDNNH HPWTVPTVFQ SPLDNSDAFL LVVGFLLPSV LLTDPETPLG ELTRSTHCP	KMQRTVNTIW P FLHTAISLDR RCGYKFGGLSS PQTFQRP STHLKLFPSA IMIACYSFIV KTLMSWDHVC NNVISERNST	Homo sapiens
79	758	Complement Component 5a Receptor 1	NM_001736	agggggagcc cactatgatg ctgcgtgttc ctgggcaatg atctggttcc ttcacgtcca ccctccctca gaccgcttcc gcctggatcg ctgtaccggg agccacgaca tggcctctac agggccacgc atcttctggt ccacaccttc tgctgcatca aaatccctcc aagtcattca acagcctcat ttttcacttc cctgtctttc tgcaagggtga catctttcca atatggcaat aaaaaaatgt tttgggacaa aaagaaaaat aggtgggtgg	caggagacca acaaggatac cagacatcct ccctgggtgt tcaacttggc ttgtacagca tctgtctcaa tctgtgtgtt tgctgtgctt cctgtgacct tgggtccggga aacggcggtga tcacgctcac ggtccaccaa tgccctacca accocatcat ccagcctcct cgggtccac gggccactgt acttttcgtg ccagacttgt acacttccct tcccaggctt aggtgtgaac atttatttta aacagaagtc aggctgagag atcacctgag	gaacatgaac cctggacctc ggccttggtc ctgggtgacg ggtagccgac tcaccactgg catgtacgcc taaacccatc ggcttggggt ggagtacttt gcgagccgtg gatttgttac gacactcaag ggtgacgggg taagctggac ctacgtgtgt ccggaacgtg agtggacact ggcccgatgt ggatgggtgt ccctcctttt ctagggagca ttgaaaaaca aggggaactca tggcaagtgt catggagtta cagtggtctca gtcaagagtt	tccttcaatt aacacccctg atctttgcag gcattcgagg ttcctctcct ccctttggcg agcattctgc tctgggccac tcttcccgag tgggtgccaga ttagccctgc ccacaaaagg gccatcgctc actttctacc gtggtggtgg cagtggtggc ccttccctgga tctcctttgc gccggccagg ttgactgaag atggcccaga ccccttccct accttagcta ccagcgggac ccctccacc aacagaaacc gaatacacag gaaataatgt tctaaagctct catggaatc cgcctgtaac ccagaccagg	tgattatggg A tgataaaac tcttaacacg tggtggagtg catcaatgcc gcccactctg cagcatectg catcagcgcc ggtcccgctg acttcccgag tcttggtgtg ggctggctct tgctccggac cagtggtggc gcatcggtga tctcctttgc ccttccaggc agtcctgggt tagggagagc agaccaggc agtgtaggag cctccctctg ctccactctc tctctcctc ctccactctt cccccccc cgatattctc ggatattctc attctcgctt tcaaaaagttc ttaattttaa tgggaggtga ctggccagca tggtgaaacc	Homo sapiens	

Homo  
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P

NP\_001727.1

Complement

Component 5a

Receptor 1

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NM\_005795

Calcitonin

Receptor-

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Receptor

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82	767	Calcitonin Receptor-like Receptor	NP_005786.1	<p>gccaatttg tgcgtcttta ctggtgaatc ttttttctt gttaaatatt gtacgcgttc</p> <p>tcatcacaa gttaaaagtt acacaccaag cggaatccaa tctgtacatg aaagctgtga</p> <p>gagctactct tatcttggtg ccattgcttg gcattgaatt tgtgtgatt ccattggcgc</p> <p>ctgaaggaaa gattgcagag gaggtatatg actacatcat gcacatcctt atgcacttcc</p> <p>aggtctcttt ggtctctacc attttctgct tctttaatgg agaggttcaa gcaattctga</p> <p>gaagaaaactg gaatcaatc aaaaatccaat ttggaaaacag cttttccaac tcagaagctc</p> <p>ttcgtagtgc gtcttacaca gtgtcaacaa tcagtgatgg tccaggttat agtcatgact</p> <p>gtcctagtga acacttaaat ggaataagca tccatgatat tgaataatggt cttcttaaac</p> <p>cagaaaaatt atataattga aaatagaagg atggttgtct cactgtttgg tgccttctct</p> <p>aactcaagga ctgggaccca tgactctgta gccagaagac ttcaatatta aatgactttg</p> <p>gggaatgtca taaagaagag ccttcacatg aaattagtag tgtgtgata agagtgtaac</p> <p>atccagctct atgtgggaaa aaagaaatcc tggtttgtaa tgttgtcag taaatactcc</p> <p>catatgcct gatgtgacgc tactaacctg acatcaccaa gtgtggaatt ggagaaaagc</p> <p>acaatcaact tttctgagct ggtgaagcc agttccagca caccattgat gaattcaaac</p> <p>aaatggctgt aaaactaaac atacatgttg ggcattgatt cacccttatt cccccaga</p> <p>gacctagcta aggtctataa acatgaaggg aaaattagct tttagtttta aaactcttta</p> <p>tccatcttg attgggcgag ttgacttttt tttttccca gagtgcgcta gtcccttttg</p> <p>taactaccct ctcaaatgga caataccaga agtgaattat cctgctggc tttctttct</p> <p>ctatgaaaag caactgagta caattgttat gatctactca ttgtctgaca catcagttat</p> <p>atcttgggc atatccattg tggaaactgg atgaacagga tgtataatat gcaatcttac</p> <p>ttctatatca ttaggaaaac atcttagttg atgtacaaa acacttgtc aacctctcc</p> <p>tgtcttacca aacagtggga gggaaatcct agctgtaaat ataaattttg ccttccatt</p> <p>tctactgtat aaacaaatta gcaatcattt tatataaaga aaatcaatga aggattctt</p> <p>atcttcttgg aattttgtaa aaagaaattg tgaataatga gcttgtaaat actccattat</p> <p>tttattttat agtctcaaat caaatacata caacctatgt aatttttaaa gcaatatat</p> <p>aatgcaacaa tgtgtgtatg ttaatatctg atactgtatc tgggctgatt ttttaataa</p> <p>aatagactct ggaatgct</p>	Homo sapiens
83	832	Cannabinoid Receptor 1	NM_001840	<p>ggggactacg gagagctctg cagggagcgc agggccccgc cggggccaa ggaacttctg A</p> <p>tcccaggac caggggatgc gaaggatgg cccctgtgg gtcactttct cagctattt</p> <p>gagctcagcc taatcaaga ctgaggttat gaagtcgac tagatggcc ttgcagatac</p> <p>cacctccgc accatcacca ctgacctct gtacgtggc tcaatgaca ttcagtacga</p> <p>agacatcaa ggtgacatgg catccaaatt aggtacttc ccacagaaat tcccttaac</p> <p>ttcctttagg ggaagtcctt tccaagagaa gatgactgag ggagacaacc ccagctagt</p> <p>YTVSTISDGP GYSHDCPSEH LNKSIHDIE NVLLKPENLY N</p>	Homo sapiens

84	832	Cannabinoid Receptor 1	NP_001831.1	<p>             MKSILDGLAD TTFRTITDLD LYVGSNDIQY EDIKGDMASK LGYFPQKEPL TSFRGSPFQE P              KMTAGDNPQL VPADQVNITE FYNKSLSEK ENEENIQCGE NFMDECFMV LNPSQQLAIA              VLSLTGLTFT VLENLLVLCV ILHSRSLRCR PSYHFIGSLA VADLLGSVIF VYSFIDFHV              HRKDSRNVEL FKLGGVTASF TASVGSLELT AIDRYISIRH PLAYKRIVTR PKAVVAFCLM              WTIAIVIAVL PLIGWNCEKL QSVCSDFPH IDETYLMEFI GVTSVLLFI VYAYMYILWK              AHSNAVMIQ RGTQKSIH TSEDGKVQVT RPDQARMDIR LAKTLVLILV VLIICWGPLL              AIMVYDVEGK MNKLIKTVFA FCSMLCLINS TVNPIIYALR SKDLRHAFRS MFPSCEGTAQ              PLDNSMGDSD CLHKHANNA SVHRAAESCI KSTVKIAKVT MSVSTDTSAE AL              caggctctgg gagaggacag aaacaaactg gactcctcag cccccggcag ctccccagtc A              ccagccacc acaacacaac ccaaaagcctt ctagacaagc tcagtggaaat ctgaagggcc              caccctatgg aggaatgctg ggtgacagag atagccaatg gctccaagga tggcttggat              tccaacccta tgaaggatta catgatcctg agtggctccc agaagacagc tgttgcgtg              ttgtgcactc ttctgggctt gctaaagtgc ctggagaacg tggctgtgct ctatctgac              ctgtcctccc accaactccg ccggaagccc tcatacctgt tcattggcag ctgggctggg              gctgacttcc tggccagtgt ggtctttgca tgcagctttg tgaattcca tgttttccat              ggtgtggatt ccaaggctgt ctctcgtgctg aagattggca gcgtgactat gaccttcaca              gcctctgtgg gtagcctct gctgaccgct attgaccgat accctgcct gcgctatcca           </p>	Homo sapiens
85	833	Cannabinoid Receptor 2	NM_001841	<p>             caggctctgg gagaggacag aaacaaactg gactcctcag cccccggcag ctccccagtc A              ccagccacc acaacacaac ccaaaagcctt ctagacaagc tcagtggaaat ctgaagggcc              caccctatgg aggaatgctg ggtgacagag atagccaatg gctccaagga tggcttggat              tccaacccta tgaaggatta catgatcctg agtggctccc agaagacagc tgttgcgtg              ttgtgcactc ttctgggctt gctaaagtgc ctggagaacg tggctgtgct ctatctgac              ctgtcctccc accaactccg ccggaagccc tcatacctgt tcattggcag ctgggctggg              gctgacttcc tggccagtgt ggtctttgca tgcagctttg tgaattcca tgttttccat              ggtgtggatt ccaaggctgt ctctcgtgctg aagattggca gcgtgactat gaccttcaca              gcctctgtgg gtagcctct gctgaccgct attgaccgat accctgcct gcgctatcca           </p>	Homo sapiens

86	Cannabinoid Receptor 2	NP_001832.1	MEECWVTEIA NGSKDGLDSN PMKDYMILSG PQKTAVAVLC TLLGLLSALE NVAVLYLILS P	Homo sapiens
87	Leukocyte Antigen CD97	NM_001784	SHQLRRKPSY LFIFGLAGAD FLASVVFACS FVNHFVHGV DSKAVFLIKI GSVTMTFTAS VGSLLLTALD RYLCRLRPPS YKALLTRGRA LVTLGIMWVL SALVSYLPLM GWTCCPRPCS ELFPLIPNDY LLSWLLFIAP LFSGIITYTG HVLWKAHQHV ASLSGHQDRQ VPGMARMLRD VRLAKTLGLV LAVLLICWFP VLALMAHSLA TTLSDQVKA FAFCSMLCLI NSMNPVIYA LRSGEIRSSA HHCLAHWKKC VRGLGSEAKE EAPRSSVTET EADGKITPWP DSRDLDSLDC agcctgtgga gacgggacag cctgtgcca cctactcttt cctgtccgc tctgtccgc A agctccaacc atgggaggcc gcgtctttct cgcattctgt gtctggctga ctctgccggg agctgaaaac caggactcca ggggctgtgc ccgtgtgtgc cctcagaact cctcgtgtgt caatgccacc cctgtcgtct gcaatccagg gttcagctct tttctgaga tcatcaccac cccgacggag actgtgacg acatcaacga gtgtgcaaca cctcgaaaag tgtcatgcgg aaaattctcg gactgctgga acacagaggg gagctacgac tgcgtgtgca gcccgggata tgagcctgtt tctggggcaa aaacattcaa gaatgagagc gagaacacct gtcaagatgt ggacgagtcg agctccgggc agcatcagt tgacagctcc accgtctgct tcaacacct gggttcatac agctccgct gccggcccag ctggaagccc agacacggaa tcccgaataa ccaaaaggac actgtctgtg aagatatgac tttctccacc tggaccgccg cccctggagt ccacagccag acgctttccc gattcttga caaagtccag gacctgggca gagactccaa gacaagctca gccgaggtca ccatccagaa tgtcatcaaa ttggtgatg aactgatgga agctcctgga gacgtagagg ccctggcgcc acctgtccgg cactcatag ccaccagct gctctcaac cttgaagata tcatgaggat cctggccaag agctgcta aagccctt	Homo sapiens



88	922	Leukocyte Antigen CD97	NP_001775.1	<p>cactacatt tcccttcga acacagagct gaccctgat atccaggagc ggggggacaa gaacgtcact atgggtcaga gcagcgacg catgaagctg aattgggctg tggcagctgg agccgaggat ccaggccccc ccgtggcggg catcctctcc atccagaaca tgacgacatt gctggccaat gctccttga acctgcattc caagaagcaa gccgaactgg aggagatata tgaagcagc atccgtggtg tccaaactcag acgctctctt gccgtcaact ccactcttct gagccacaac aacaccaagg aactcaactc ccccatcctt ttcgcttctt cccaccttga gtcctccgat ggggaggcgg gaagagaccc tcctggccaa gacgtgatgc ctggggccacg gcaggagctg ctctgtgcct tctggaagag tgacagcgac aggggagggc actggggccac cgaggtctgc caggtgctgg gcagcaagaa cggcagcacc acctgccaat gcagccacct gagcagcttt acgatacctta tggctcatta tggctcatta gactggaagc tgacctgat caccagggtg ggaactggcg tgtaactctt ctgcctgctg ctgtgcatcc tcactttctt gctggtgcgg cccatccagg gctcgcgcac caccatacac ctgcacctct gcactgcct cttcgtgggc tccaccatct tcctggcggg catcgagaac gaaggcggcc aggtggggct gcgtgcgc ctggtggcgg gctgctgca ctactgtttc ctggcgcctt tctgctggat gagcctcgaa ggctggagc tctactttct tgtgtgcg gtgttccaa gccagggcct gagtaacgcg tggctctgcc tgatcggtc tggcgtgccc ctgctcatcg tggcgtctc ggctgccatc tacagcaagg gctacggcg cccagatac tgcctgttgg actttgagca gggcttctc tggagcttct tgggacctgt gacctctc attttgtga atgctgtcat ttctgtgact accgtctgga agctcactca gaagtcttct gaaatcaatc cagacatgaa gaaattaaag aaggcgagg cgctgacct caccggccatc gcgcagctct tctgttggg ctgcacctgg gtctttggcc tgttcatctt cgacgatcgg agcttgggtc tgacctatgt gtttaccatc ctcaactgcc tgcaggcgc ctctctctac ctgtgcact gcctgctcaa caagaagggt cgggaagaat accggaagt ggcctgccta gtgctgggg ggagcaagta ctcagaattc acctccacca cgtctggcac tggccacatc cagacccggg cctcagggc atcagagtcc ggcataatgaa ggcgcattgt tctggacggc ccagcagctc ctgtggccac agcagctttg tacacgaaga ccatccatcc tcccttcgtc caccactcta ctccctccac cctccctccc tgatcccgtg tgccaccagg agggagtggc agctatagtc tggcaccaaa gtccaggaca cccagtgggg tggagtggga gccactggc ctgctgctgg ctgctctct gtccacctt gtgacccagg gtggggacag gggctggccc agggctgcaa tgcagcatgt tgccctggca cctgtggcca gtactcggga cagactaagg gcgcttgtcc catcctggac tttctctc atgtctttgc tgcagaactg aagagactag gcgtggggc tcagcttccc tcttaagcta agactgatgt cagaggcccc atggcaggc ccttggggc cactgcctga ggctcacggt acagaggcct gccctgcctg gccgggcagg aggttctcac tgttgtgaag gtgtgagacg ttgtgtaatg tgtttttatc tgttaaaatt tttcagtgtt gacacttaaa atataacaca tgcatacaga aaaaaaaaaa aaaaaaaaaa a</p>	Homo sapiens
			<p>MGGRVFLAFC VWLTLPGAET QDSRGCARWC PQNSSCVNAT ACRCNPGFSS FSEIITPTE P TCDDINECAT PSKVSCGKFS DCWNTEGSYD CVCSPGYEPV SGAKTFKNES ENTQDQVDEC SSGQHQCDSS TVCFNTVGSY SCRCRPGWKP RHGIPNNQKD TVCEDMTFST WTPPPGVHSQ TLSRFFDKVQ DLGRDSKTSS AEVTIQNVIK LVDELMEAPG DVEALAPPVR HLIATQLLSN LEDIMRILAK SLPKGPFTYI SPSNTELTLM IQERGDKNVT MGQSSARMKL NWAVAAGAE PGPAVAGILS IQNMTLLAN ASLNLSKKQ AELEEIYESS IRGVQLRRLS AVNSIFLSHN</p>		

NTKELNSPIL	FAFSHLESSD	GEAGRDPPAK	DVMGPRQEL	LCAFWKSDSD	RGGHWATEVC
QVLGSKNGST	TCQCSHLSSF	TILMAHYDVE	DWKLTILTRV	GLALSLFCLL	LCILTFLLVR
PIQGSRTTIH	LHLCICLFVG	STIFLAGIEN	EGGQVGLRCR	LVAGLLHYCF	LAAFCEWMSLE
GLELYFLVVR	VFQGGGLSTR	WLCLIGYGVV	LLIVGVSAAI	YSKGYGRPRY	CWLDFEQGFL
WSFLGPVTFI	ILCNAVIFVT	TVWKLTQKFS	EINPDMKKLK	KARALITITAI	AQLFLLGCTW
VFGLFIFDDR	SLVLTIVFTI	LNCLOGAFLY	LLHCLLNKKV	REEYRKWACL	VAGGSKYSEF
TSTTSGTGN	QTRALPASES	GI			
ctaaagtttt	tttctttgaa	tgacagaact	acagcataat	gcgtggcttc	aacctgctcc
tcttctgggg	atgttgtgtt	atgcacagct	gggaaggcca	cataagaccc	acacggaaaac
caaacacaaa	gggtaataac	tgtagagaca	gtacctttgt	ccagcttat	gccacctgca
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90	EMR1 Hormone NP_001965.1 Receptor	941	<p> tgcgggctt cctgcactac ctttctcttg cctgtctctt ctggatgctg gtggaggctg  tgatactgt cttgatggtc agaaacctga aggtgtgtaa ttacttcagc tctcgcaaca  tcaagatgt gcacatctgt gcctttggtt atgggctgcc gatctgggtg gtggtgatct  ctgccagtgt gcagccacag ggtataggaa tgcataatcg ctgctggctg aatacagaga  cagggttcac ctggagtttc ttggggccag ttgacacagt tatagtgtgc aactcccttc  tctgacctg gaccttgggt atcctgaggc agaggctttc cagtgtaaat gccgaagtct  caacgctaaa agacaccagg ttactgacct tcaaggcctt tgcccagctc ttcactcctg  gctgctcctg ggtgctgggc attttctaga ttggacctgt ggcagggtgc atggcttacc  tgttcaccat catcaacagc ctgcaggggg ccttcactt cctcatccac tgtctgtca  acggccaggt acgagaagaa tacaagaggt ggatcactgg gaagacgaag ccagctccc  agtcacagac ctcaaggatc ttgctgtcct ccatgccatc cgcttccaa acgggttaaa  gcctttcttg ctttcaata tgcctatggag ccacagttga ggacagtagt ttcctgcagg  agcctaccct gaaatctctt ctacagcttaa catggaaatg aggatccac cagccccaga  acctctggg gaagaatgtt gggggccgtc ttcctgtggt tglatgcact gatgagaaat  cagacgttct tgcctcaaac gacctttta tcttcgtgct ctgcaacttc ttcaattcca  gagtttctga gaacagacc aaattcaatg gcatgaccaa gaacacctgg ctaccattt  gttttctct gccttcttg gtgcatggtt ctaagcgtgc cctccagcg cctatcatac  gcctgacaca gagaacctc caataaatga tttgtgcct gtctgactga tttaacctaa  aaaaaaaaa aaaaaaaaaa  MRGFNLLFW GCCVMHSWEG HIRPTRKPNP KGNCRDSTL CPAYATCTNT VDSYYCTCKQ P  GFLSSNGQH FKDPGVRCCK IDECSQSPQ CGPNSSCKNL SGRYKCSCLD GFSSPTGNMW  VPGKPGNFSC TDINECLTSR VCPHSDCVN SMGSYSCSCQ VGFISRNSTC EDVNECADPR  ACPEHATCNN TVGNYSFCFN PGFESSGHL SCQGLKASCE DIDECTEMCP INSTCTNTPG  SYFCTCHPGF APSSGQLNFT DQVECRDID ECRQDPSTCG PMSICTNALG SYSCGCIYGF  HPNPEGSKD GNFSQQRVLE KCKEDVIPDN KQIQCCQST AVKPAYVSFC AQINNIFSVL  DKVCENKTV VSLKNTTESF VPVLKQISMW TKFTKEETSS LATVFLESVE SMTLASFWKP  SANVTPAVRA EYLDIESKVI NKECSENV LTLVAKGDKM KIGCSTIEES ESTETTGVAF  VSFVGMESVL NERFFQDHQA PLTTSKILK MNSRVVGGIM TGEKKDGFSD PIYTLENVQ  PKQFERPIC VSWSTDVKGK RWTSGCVIL EASETYTICS CNQMANLAVI MASGELTMDF  SLYIIISHVGI IISLVCLVLA IATFLCRSI RNHNTYLHLH LCVCLLLAKT LFLAGIHKTD  NKTGCAIIAG FLHYLFLACF FWMVLEAVIL FLVNRNLKVV NYFSSRNIMK LHICAFGYGL  PMLVVVISAS VQPGYGMHN RCWLNTETGF IWSFLGPVCT VIVINSLLLT WTLWILRQRL  SSVNAEVSTL KDTRLITFKA FAQLFILGCS WVLGIFQIGP VAGVMAYLFT IINSLOQAFI  FLIHCLLNGQ VREEYKRWIT GKTKPSSQSQ TSRILLSSMP SASKTG  ggaacacgac acctagaagt aggaatgaga ttcgctgaag ttcctctctg aggaagaccc A  acctctcgc ctggagagcc ggggctggcg gtgcctgagg acctctcg cctggacagc  ccacgcgggc ttggggggcc tgcctctgcc ctcatgggga ggcctcgtt tccccgaagc  gcgagtgaat attcaaatgg ccagtagggg gcgcactcgg aagtggccgc cccgcagtag  gcagttcagc ggccccgaga gtccggggag ggaggttat tctccgcctg cagcagactg  tgaatccgc aacctagc aggaagggcg gcctgtgtg ggaagaggcc accaacatct  ggacggcagg taccagaga gtgagcagct ccacgcggga ctgtgcacgg tggccgacac </p>	Homo sapiens
91	G Protein-Coupled Receptor GPR30 NM_001505	965	<p> ggaacacgac acctagaagt aggaatgaga ttcgctgaag ttcctctctg aggaagaccc A  acctctcgc ctggagagcc ggggctggcg gtgcctgagg acctctcg cctggacagc  ccacgcgggc ttggggggcc tgcctctgcc ctcatgggga ggcctcgtt tccccgaagc  gcgagtgaat attcaaatgg ccagtagggg gcgcactcgg aagtggccgc cccgcagtag  gcagttcagc ggccccgaga gtccggggag ggaggttat tctccgcctg cagcagactg  tgaatccgc aacctagc aggaagggcg gcctgtgtg ggaagaggcc accaacatct  ggacggcagg taccagaga gtgagcagct ccacgcggga ctgtgcacgg tggccgacac </p>	Homo sapiens

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Coupled Receptor GPR30	93	Cholecystoki nin A Receptor	NM_000730	978	<p>           LSCLYTIFLF PIGFVGNILI LVVNISFREK MTIPDLYFIN LAVADLILVA DSLIEVFNH            ERYYDIAVLC TFMSLFLQVN MYSSVFFLTW MSFDRIYALA RAMRCSLFRT KKHARLSCGL            IWMASVSATL VPFTAVHLQH TDEACFCFAD VREVQWLEVT LGFIVPFAII GLCYSLIVRV            LVRARHRGL RPRQKALRM ILAVLVFFV CWLPENVFIS VHLLQRTQPG AAPCKQSFRR            AHPLTGHIVN LAAFNSCLN PLIYSFLGET FRDKIRLYIE QKTNLPALNR FCHAALKAVI            PDSTEQSDVR FSSAV         </p>	sapiens
					<p>           ggaatggctg aaaaagccca cacctggaaa tcactccctc cctgtccctc cagggcaggt A            tgcattctcg agacgcttcg gtcattagag gaatgagccg ggagtggagca attcaccagc            tctccagcac ttggtgaaa gcagcaggca aggatggatg tgggtgacag ccttcttctg            aatggaagca acatcactcc tccctgtgaa ctcgggctcg aaaaagagac gcttttctgc            ttggatcagc cccgtccttc caaagagtgg cagccagcgg tgcagattct cttgtactcc            ttgatattcc tgcacagcgt gctgggaaac acgctggta tcacggtgct gattcggaaac            aagcggatgc ggacgggtcac caacatcttc ctctctccc tggctgtcag cgacctcatg            ctctgtctct tctgcatgcc gtccaacctc atccccaatc tgcacaagga ttcatcttc            gggagcgcg ttgcaagac caccacctac ttcattggga cctctgtgag tgtatctacc            ttaaatctgg tagccatata tctagagaga tatggtgcga ttgcaaac cttacagctc            cgggtctggc agacaaaatc ccatgctttg aaggtgattg ctgctacctg gtgcctttcc            ttaccatca tgactccgta cccatttat agcaacttgg tgccttttac caaaaataac            aaccagaccg cgaatatgtg ccgctttcta ctgcaaatg atgttatgca gcagtcctgg            cacacattcc tgttactcat cctcttctt attcctggaa ttgtgatgat ggtggcatat            ggattaatct ctttggaaact ctaccaggga ataaaattg aggtcagcca gaagaagtct            gctaaagaaa ggaacactag caccaccagc agcggcaaat atgaggtgctg cagtggtgtg            tacctgcaaa agaccaggcc cccgagggaag ctggagctcc ggcagctgtc caccggcagc            agcagcaggc caaccgcac ccgagtaac agtcccgag caaactgat ggccaaagaaa            aggtgatcc gcattgtcat cgtcatcgtg gctctcttct tccgtgtctg gatgcccatc            ttcagcgcca acgctggcg ggctacgac accgctccg cagagcgccg cctctcagga            accccattt ccttcattct cctcctgtcc tacacctct cctgctgcaa ccccatcatc            tactgttca tgaacaaaag ctccgcctc ggcttcattg ccaccttccc ctgtgcccc            aatcctggtc cccaggggc gaggggagag gtgggggaggg aggaagaaagg cgggaccaca            ggagcctctc tgtccagggt ctcgtacagc catatgagt cctcgtgccc acccagtgga            gatgtccctt gacctccac cgcagaagga aggcaggag gaggcagaga agaaagaacg            gaagaagaga tcaggaagag aaggagcaga gcagagctga tggagaagga aggtccatc            tccagtggga actcttcaag gtctctttc atccttcac tgattccaga gcactgctcc            agtggggcca tgattggttt ctaggcagtt caaagcagga tatgttaagt acactcaac            catcag         </p>	Homo sapiens
Coupled Receptor GPR30	94	Cholecystoki nin A Receptor	NP_000721.1	978	<p>           MDVVDLSLVN GSNITPPCEL GLENETFLCL DQPRPSKEWQ PAVQILLYSL IFLLSVLGNT P            LVITVLIRNK RMRVTNIFL LSLAVSDML CLFCMPFNLI PNLLKDFIFG SAVCKTTTYF            MGTSVSVSTF NLVAISLERY GAICKPLQSR VWQTKSHALK VIAATWCLSF TIMTPYPIYS            NLVPFTKNNN QTANMCRFL PNDVMQSWH TFLLLILFLI PGIVMWAYG LISLELYQGI            KFEASQKKA KERKPTSS GKYESDGCY LQKTRPPRKL ELRQLSTGSS SRANRIRNS            SAANLMAKR VIRMLIVIW LFFLCWMPIF SANAWRAYDT ASERRLSGT PISFILLLSY         </p>	sapiens

95	1103	Corticotropin releasing factor Receptor 2	NP_001883	MSASVPPQ	TSSCVNPIIY CFMNRFRLG FMATFPCCPN PGPPGARGEV GEHEEGGTG ASLSRFSYSH	atggacgcgg cactgctcca cagcctgctg gagccaact gcagcctggc gctggctgaa A gagctgctct tggacggctg ggggccacc ctagaccocg aggtgcccta ctctactgc aacacgacct tggaccagat cggaaacgtg tggccccgca gcgtgccccg agccctcgtg gagaggccgt gccccgagta cttcaacggc gtcaagtaca acacgacccg gaatgcctat cgagaatgct tggagaatgg gacgtgggcc tcaaatgaca actactaca gtgtgagccc atttggatg acaagcagag gaagtatgac ctgcactacc gcctgcctt tctcgtcaac tacctgggcc actgctatc tgtggcagcc ctggtggccg cctcctgct tttcctggcc ctgcggagca ttgctgtct cgggaatgtg attcaactgga acctcatcac cacctttatc ctgcgaaatg tcatgtggtt cctgctgcag ctggttgacc atgaagtga cgaagcaat gaggtctggt gccactgcat caccaccatc tcaactact tctggtgac caactcttc tgatgtttg tggaggctg ctacctgac acggccattg tcatgacct ctccactgag cgctgcgca agtgcctctt cctcttcatc ggtggtgca tccctttccc catcatcgtc gcctgggcca tggcaagct ctactatgag aatgaacagt gctggtttgg caaggagcct ggcgacctgg tggactacat ctaccaaggc cccatcttc tctgctcct gatcaatttc gtatttctgt tcaacatcgt caggatccta atgacaaagt tacgcgcgtc caccacatcc gagacaatcc agtacaggaa ggcagtgaag gccacctgg tgcctctgcc cctcctgggc atcacctaca tgccttctt cgtcaatccc ggggaggagc acctgtcaca gatcatgttc atctatttca actccttctt gcagtcgttc cagggtttct tctgtctgt ctctactgc ttcttcaatg gagaggtgct ctacgacctg aggaagaggt ggcacgcgtg gcaggacct cactcccttc ggtcccccag ggcgcgggcc atgtccatcc ctacatcacc cacaggatc agcttcaca gcatcaagca gacggccgt gtgtgacccc tgggtgccc acctgcacag ctcccctgtc ctctccacc ttcttctct tgggttctctg tctggggcag gctctcgtg ggcaggagat ggggggggag agaccagctc tccagcctgg caggaaagag ggggtgcggc agccaagggg gactgcaagg gacagggat agtgggggcc accaggctca gcgcaagagg aagcagaggg aattcacagg acccctgag aagagccagt cagatgtctg caggcatthg cccatccag cctctctggc cagggcctta ctgggcccag agcagagaag gacctgtcca acacacacag ctatttatag tagcagacac aggtctccc tgcctactc atggagccag cagccaggca atggtgtggc cctgcactgg ccttggact ccacactcag tgggtccctg cagttgggtg ggttaacgcc aagcaaaagg tcaagtttggc tgcctatcc cagggtgtc acctagagag gctcacttgt accccacct gttcctgtgt cccctcccca gccatcctcc ccgcttggg ggtcccatga aggatgcagg cttccaggcc tggcttctc tcttgggaga ccccctctct gcttagtcca cagattaggc aatcaaggaa gacgccatca ggaagccac atccttagtc aaccagtgc atcgtgcggg gcaaatag gagcagaggc atggaggagg gaggcgtggg atgggaatag cagaaccacc atgtcttcag tgattgaac tcatacccca ttgccccttg cctccagtc tccccttcag aaacatctct gctcctgtg aaataaacca tgctctcttg	Homo sapiens
96	1103	Corticotropin releasing factor	NP_001874.1	MDAALLHSL	ERPCPEYFNG VKYNTNRNAY RECLENGTWA SKINYSQCEP ILDDKQRYD LHYRIALVNV YLGHCVSVA LVAELLFLA LRSIRCLRN IHNLIITFI LRNVWFLLQ LVDHEVHESN	atggacgcgg cactgctcca cagcctgctg gagccaact gcagcctggc gctggctgaa A gagctgctct tggacggctg ggggccacc ctagaccocg aggtgcccta ctctactgc aacacgacct tggaccagat cggaaacgtg tggccccgca gcgtgccccg agccctcgtg gagaggccgt gccccgagta cttcaacggc gtcaagtaca acacgacccg gaatgcctat cgagaatgct tggagaatgg gacgtgggcc tcaaatgaca actactaca gtgtgagccc atttggatg acaagcagag gaagtatgac ctgcactacc gcctgcctt tctcgtcaac tacctgggcc actgctatc tgtggcagcc ctggtggccg cctcctgct tttcctggcc ctgcggagca ttgctgtct cgggaatgtg attcaactgga acctcatcac cacctttatc ctgcgaaatg tcatgtggtt cctgctgcag ctggttgacc atgaagtga cgaagcaat gaggtctggt gccactgcat caccaccatc tcaactact tctggtgac caactcttc tgatgtttg tggaggctg ctacctgac acggccattg tcatgacct ctccactgag cgctgcgca agtgcctctt cctcttcatc ggtggtgca tccctttccc catcatcgtc gcctgggcca tggcaagct ctactatgag aatgaacagt gctggtttgg caaggagcct ggcgacctgg tggactacat ctaccaaggc cccatcttc tctgctcct gatcaatttc gtatttctgt tcaacatcgt caggatccta atgacaaagt tacgcgcgtc caccacatcc gagacaatcc agtacaggaa ggcagtgaag gccacctgg tgcctctgcc cctcctgggc atcacctaca tgccttctt cgtcaatccc ggggaggagc acctgtcaca gatcatgttc atctatttca actccttctt gcagtcgttc cagggtttct tctgtctgt ctctactgc ttcttcaatg gagaggtgct ctacgacctg aggaagaggt ggcacgcgtg gcaggacct cactcccttc ggtcccccag ggcgcgggcc atgtccatcc ctacatcacc cacaggatc agcttcaca gcatcaagca gacggccgt gtgtgacccc tgggtgccc acctgcacag ctcccctgtc ctctccacc ttcttctct tgggttctctg tctggggcag gctctcgtg ggcaggagat ggggggggag agaccagctc tccagcctgg caggaaagag ggggtgcggc agccaagggg gactgcaagg gacagggat agtgggggcc accaggctca gcgcaagagg aagcagaggg aattcacagg acccctgag aagagccagt cagatgtctg caggcatthg cccatccag cctctctggc cagggcctta ctgggcccag agcagagaag gacctgtcca acacacacag ctatttatag tagcagacac aggtctccc tgcctactc atggagccag cagccaggca atggtgtggc cctgcactgg ccttggact ccacactcag tgggtccctg cagttgggtg ggttaacgcc aagcaaaagg tcaagtttggc tgcctatcc cagggtgtc acctagagag gctcacttgt accccacct gttcctgtgt cccctcccca gccatcctcc ccgcttggg ggtcccatga aggatgcagg cttccaggcc tggcttctc tcttgggaga ccccctctct gcttagtcca cagattaggc aatcaaggaa gacgccatca ggaagccac atccttagtc aaccagtgc atcgtgcggg gcaaatag gagcagaggc atggaggagg gaggcgtggg atgggaatag cagaaccacc atgtcttcag tgattgaac tcatacccca ttgccccttg cctccagtc tccccttcag aaacatctct gctcctgtg aaataaacca tgctctcttg	Homo sapiens

NM 000794

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					Homo sapiens
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attgctctgg	ggtttgctat	taagaaacta	aggtacggtg	agactctgag	gtgtcaggag
agccctctgc	tgctttccaa	cacacaatta	actccgtttc	caaatacatt	ccagttgtatt

98	1240	Dopamine Receptor D1	NP_000785.1	<p> MRTLN1TSAMD GTGLVVERDF SVRI1TACFL SLL1LSTLLG NTLVCAAVIR FRHLRSKVTN P  FFVISLAVSD LLVAVLVMPW KAVAEIAGFW PFGSFCNIWV AFDIMCSTAS ILNLCVISVD  RYWAISSPER YERKMTPKAA FILISVANTL SVLISFIPVQ LSWHKAKPTS PSDGNATSLA  ETIDNCDSSL SRTYAISSSV ISFYIPVAIM IVTYTRIYRI AQQIRRIAA LERAAVHAKN  CQTTTNGKRP VECSQPESSF KMSFKRETKV LKTL1SVIMGV FVCCWLPFFI LNCILPFCGS  GETQPF1CIDS NTFDVFVWFG WANSSINPII YAFNADFRKA FSTLLGCYRL CPATNNAIET  VSINNNGAAM FSSHHEPRGS ISKECNLVYL IPHAVGSSSED LKKEEAAGIA RPLEKLSPAL  SVILDYDTDV SLEKIQIPITQ NGQHPT  ggcacgagcg agggctgaag ttgggacgcg gcacagacgc cccctgcagt ccagcccgaa A  atgctgcgcg caggcagcaa cggeacgcgcg taccggggcg agtgcgtctc ataccagcag  ctggcgcgag ggaacgcgt gggggctcg gggggggcac cgccactggg gccctcacag  gtggtcacgc cctgcctgct gacctactc atcatctgga cctgctggg caacgtgctg  gtgtgcgcag ccatcgtgcg gagecgccac ctgttcgtg gcgtgcgcg acatgaccaa cgtcttcac  gtgtctctgg ccgtgtcaga ccttttcgtg gcgtgcgcg tcatgccctg gaaggcagtc  gccgaggtgg ccggttactg gccctttgga gcgtctcg acgtctgggt ggccctcgac  atcatgtgct ccactgcctc cactcgaac ctgtgcgtca tcagcgtgga ccgctactgg  gccatctcca ggcccttccg ctacaagcg cagatgactc agcgcagtcg cttggtcatg  gtcggcctgg catggacctt gtccatctc atctcttca ttcgggtcca gctcaactgg  cacaggacc aggcggcctc ttggggcggg ctggacctgc caaacaacct ggccaactgg  acgccctggg agggagactt ttgggagccc gacgtgaatg cagagaactg tgaactccagc  ctgaatcgaa cctacgccat ctctctctcg ctcatcagct tctacatccc cgttgccatc  atgatactga cctacacgcg catctaccg atcgcccg tgcagatccg caggatttcc  tccctggaga gggccgcaga gcacgcgag agctgccga gcagcgagc ctgcgcgccc  gacaccagcc tgcgcgcttc catcaagaag gagaccaag ttctcaagac cctgtcgtg  atcatggggg tcttcgtgtg ttgctggctg ccttcttca tcttaactg catggctcct  ttctgcagt gacacctga aggcctcgc gccggcttc cctgcgtcag tgagaccacc  ttcgacgtct tcgtctggtt cggctgggt aactcctc tcaaccccg catctatgcc  ttcaacgcgc actttcagaa ggtgtttgcc cagctgctgg ggtgcagcca cttctgctcc  cgacgcgcgg tggagacggt gaacatcagc aatgagctca tctctacaa ccaagacatc  gtcttccaca aggaatcgc agctgcctac atccacatga tgcaccaacgc cgttaccccc  ggcaaccggg aggtggacaa cgacgaggag gagggctctt tcatgcat gtccagatc </p>	Homo sapiens
99	1241	Dopamine Receptor D5	NM_000798	<p> ggcacgagcg agggctgaag ttgggacgcg gcacagacgc cccctgcagt ccagcccgaa A  atgctgcgcg caggcagcaa cggeacgcgcg taccggggcg agtgcgtctc ataccagcag  ctggcgcgag ggaacgcgt gggggctcg gggggggcac cgccactggg gccctcacag  gtggtcacgc cctgcctgct gacctactc atcatctgga cctgctggg caacgtgctg  gtgtgcgcag ccatcgtgcg gagecgccac ctgttcgtg gcgtgcgcg acatgaccaa cgtcttcac  gtgtctctgg ccgtgtcaga ccttttcgtg gcgtgcgcg tcatgccctg gaaggcagtc  gccgaggtgg ccggttactg gccctttgga gcgtctcg acgtctgggt ggccctcgac  atcatgtgct ccactgcctc cactcgaac ctgtgcgtca tcagcgtgga ccgctactgg  gccatctcca ggcccttccg ctacaagcg cagatgactc agcgcagtcg cttggtcatg  gtcggcctgg catggacctt gtccatctc atctcttca ttcgggtcca gctcaactgg  cacaggacc aggcggcctc ttggggcggg ctggacctgc caaacaacct ggccaactgg  acgccctggg agggagactt ttgggagccc gacgtgaatg cagagaactg tgaactccagc  ctgaatcgaa cctacgccat ctctctctcg ctcatcagct tctacatccc cgttgccatc  atgatactga cctacacgcg catctaccg atcgcccg tgcagatccg caggatttcc  tccctggaga gggccgcaga gcacgcgag agctgccga gcagcgagc ctgcgcgccc  gacaccagcc tgcgcgcttc catcaagaag gagaccaag ttctcaagac cctgtcgtg  atcatggggg tcttcgtgtg ttgctggctg ccttcttca tcttaactg catggctcct  ttctgcagt gacacctga aggcctcgc gccggcttc cctgcgtcag tgagaccacc  ttcgacgtct tcgtctggtt cggctgggt aactcctc tcaaccccg catctatgcc  ttcaacgcgc actttcagaa ggtgtttgcc cagctgctgg ggtgcagcca cttctgctcc  cgacgcgcgg tggagacggt gaacatcagc aatgagctca tctctacaa ccaagacatc  gtcttccaca aggaatcgc agctgcctac atccacatga tgcaccaacgc cgttaccccc  ggcaaccggg aggtggacaa cgacgaggag gagggctctt tcatgcat gtccagatc </p>	Homo sapiens



100	1241	Dopamine Receptor D5	NP_000789.1	<p> tatacagacgt cccagatgg tgaccctggt gctgagtcgt tctgggagct ggactgcgag  ggggagattt ctttagacaa aataacacct tccacccga atggattcca ttaactgca  ttaagaaacc cctcatgga tctgataaac cgcacagaca ctgacaagca cgcacacaca  cgaaaataca tgcctttcca gtctgctcc cttatcatg tgtttctgtg tagtagctcg  tgtgcttaga aacctcacc cattgattgg tagttcgaag aattggcaga atcagttgca  ataaactcag tcaaatgtac ccagcctacc agagatggac caacgatcct atgagagaag  agagtatggt gctgggtcct taaaaaaaa aatgatactt ggtccttaaa aaatatgtc  tcccctcctt ttttaaaaa atggcttgtt cagtcacttg tttgtgttg aattgattt  taaacagcag gttgtgtgtg tgtgcagtga tgtgggtgga gcacagcttt cctgggtctg  gattcccggt gctttgtgt tatgtcattt cttctctctg tgctgtggg ggcctctta  ccatagctta agaagtatcc ctgattatt ctggtgtcta ataaacacag attatttga  aaaaaaaa aaaaaaaaa aa </p>	Homo sapiens
101	1242	Dopamine Receptor D2	NM_000795	<p> MLPPGNSGTA YPGQFALYQQ LAQGNVGGGS AGAPPLGPSQ VVTACLLTLL IIWTLGNVL P  VCAAIIVRSRH LRANMTNVFI VSLAVSDLEF ALLVMPWKAV AEVAGYWPFG AFCDVWVAFD  IMCSTASILN LCVISVDRYW AISRPFRYKR KMTQRMALVM VGLAWTLSIL ISFIPVQLNW  HRDQAASWGG LDLPNNLANW TPWEEDFWEP DVNAENCDS LNRTYAISSS LISFYIPVAI  MIVTYTRIYR IAQVQIRRIIS SLERAHEAQ SCRSSAACAP DTSLRASIKK ETKVLKTLV  IMGVFCVCCWL PFFILNCMPV FCSGHEGPP AGFPCVSETT FDFVFWFGWA NSSLPVITYA  FNADFQKVEA QLLGCSHFCS RTPVETVNIS NELISYNQDI VFHKEIAAAY IHMPNATVP  GNREVDNDEE EGPFRMFQI YQTSFDGDPV AESVWELDCE GEISLDKITP FTPNGFH  agagcctggc caccagtggt ctccacggcc ctgagtgatc cactgaatct gtcctggtat A  gatgatgatc tggagaggca gaactggagc cggcccttca acgggtcaga cgggaaggcg  gacagacccc actacaacta ctatgccaca ctgctcacc tgctcatcgc tgtcatcgtc  ttcggcaacg tctggtgtg catggtgtg tcccgcgaga agcgctgca gaccacacc  aactacctga tctgagcct cgcagtggcc gacctcctc tgccacact ggtcatgccc  tgggttctct acctggaggt ggtagtgag tggaaattca gcaggattca ctgtgacatc  ttcgtcactc tggacgtcat gatgtgacg gcgagcatcc tgaacttgtg tgccatcagc  atcgacaggt acacagctgt ggccatgccc atgctgtaca atacgcgcta cagctccaag  cgccgggtca ccgtcatgat ctccatcgtc tgggtcctgt ccttcaccat ctcccgcca  ctcctcttcg gactcaataa cgcagaccag aacgagtga tcaattgcaa cccggccttc  gtggtctact cctccatcgt cctcttctac gtgcccctca ttgtaccct gctggtctac  atcaagatct acattgtcct ccgcagacgc cgcaagcgag tcaacaccaa acgcagcagc  cgagcttcca gggccacact gaggtctcca ctcaaaggga actgtactca ccccgaggac  atgaactct gcacgttat catgaagtct aatggaggt tccagtgaa caggcgaga  gtggaggctg cccggcgagc ccaggagctg gagatggaga tgtctccag caccagccca  cccgagagga cccggtacag ccccatccca cccagccacc accagtgac tctcccgac  ccgtccacc atggtctcca cagcaactcc cagagcccc ccaaacaga gaagaatggg  catgccaaa accacccaa gattgccaa atctttgaga tccagacct gcccaatggc  aaaaaccgga cctccctcaa gacctgagc cgtaggaagc tctccagca gaaggagaag  aaagccactc agatgctgc catgttctc ggcgtgttca tcatctgtc gctgcccctc  ttcatcacac acatcctgaa catacactgt gactgcaaca tcccgctgt cctgtacagc </p>	Homo sapiens

102	1242	Dopamine Receptor D2	NP_000786.1	<p> gacctacgt ggctggggcta tgtcaacagc gccgtgaacc ccatcatcta caccacctc  aacattgagt tccgcaaggc ctctctgaag atctccact gctgactctg ctgctgccc  gcacagcagc ctgcttccca cctccctgcc caggccggcc agcctcacc ttgcgaaccg  tgagcaggaa ggctggggtg gatcgccctc ctctcttag cccggcagg cctgcaagt  ttcgcttggc tccatgctcc tcactgccc caccacctc ctctgccagg gcagtgcctag  tgagctgggc atgggtaccag cctggggct ggcctcact ggcacaaaag atgcagccgc ctctctgac  ccccctcca cctccagctc cctatcctt ggcacaaaag atgcagccgc ctctctgac  cttctctgg ggctctaggg ttgctggagc ctgagtcagg gccagaggc tgagtttct  ctttgtggg cttggcgtgg agcaggcgtt gggagagat ggcaggttca caccctgcaa  ggccacagg aggcaagcaa gctctctgc cgaggagca ggaacttca gtcctgggag  acctatgtaa ataccagact gcagggttga cccgagagat tcccaagcca aaaccttag  ctcctccc caccctgat tggacctcta cttccaggc tagtcgggac ccacctcacc  ccgttacagc tcccaagt gttccacat gctctgagaa gaggagcct catcttgaag  ggccaggag ggtctatgg gagaggaa ccttggccta gccacctg ctgcttctg  acggccctgc aatgtatccc ttctcacgc acatgctggc cagcctggg cctggcagg  aggtcaggcc ctggaactct atctgggctt gggctaggga catcagaggt tcttgagg  actgctctg ccactctg acgcaaac acttctctt tctatctt ctggccttc  ctctctctg ttctcttcc ctctcactgc ctctgcctta gaggagcca cggctaagag  gctgctgaaa acctctggc ctggcctggc cctgcccctga ggaaggagg gaagctgcag  cttgggagag cccctgggc ctgagactctg taacatcact atccgatgca ccaactaat  aaaacttga cgagtcacct tc </p>	Homo sapiens
103	1243	Dopamine Receptor D3	NM_000796	<p> taaaagaaac ggatacattc gaaagcagct atgaacacatg cactaaggctc taataggga A  gctggaaaag cagactcaa gtaattcac cttagaggca aaaaagggtg attcttct  gttcatttca tagtttctga gtcctgagaa aggcaagtt tgcttgctt gggatgtct  gctgtcagta aatggctgca ggagccgaag tggtaaacctc ctgggtctcc agaaatcaga  agaaaattt aggaagcccc ttggcaccac gcacctcct ctgggctatg gcactctga  gtcagctgag tagccacctg aactacacct gtggggcaga gaactcaca ggtgccagcc  aggcccgccc acatgcctac tatgcccct ctactcgc gctatcctg gccatcgtct  tcggcaatgg cctggtgtgc atggctgtgc tgaaggagcg ggccttgag actaccaca  actacttagt agtgagcctg gctgtggcag acttgcctgt ggcaccttg gtgatgccct  gggtgggata cctggagggtg acagggtgag tctggaattt cagccgcat tgcgtgatg  ttttgtcac cctggatgct atgatgtga cagccagcat ccttaatctc tgcgccatca  gcatagacag gtacactgca gtggtcatgc ccgttacta ccagcatggc acgggacaga </p>	Homo sapiens

104	1243	Dopamine Receptor D3	NP_000787.1	<p>gctcctgtcg gcgctggcc ctcatgatca cggccgtctg ggtactggcc ttgctgtgt  cctgccctct tctgtttggc tttataacca caggggacc cactgtctgc tccatctcca  acctgattt tgtcatctac tcttcagtgg tgccttcta cctgcccttt ggagtactg  tcttgtcta tgcagaatc tatgtggtgc tgaacaaaag gagcggaaa aggatcctca  ctgcacagaa cagtcagtgc aacagtgtca ggcctggctt ccccaacaa accctctctc  ctgaccggc acatctggag ctgaagcgtt actacagcat ctgccaggac actgccctgg  gtggaccagg cttccaagaa agaggaggag agttgaaaag agaggagaa actcggaatt  ccctgagtc caccatagcg ccaagctca gcttagaagt tcgaaaaactc agcaatggca  gattatcgac atctttgaag ctggggcccc tgcaacctcg gggagtgtcca cttcgggaga  agaaggcaac ccaaatggtg gccattgtgc ttggggcctt cattgtctgc tggctgccct  tcttcttgac ccatgttctc aatacccat gccagacatg ccacgtgtcc ccagagcttt  acagtggccac gacatggctg ggctacgtga atagcgcct caacctgtg atctatacca  ccttcaatat cgagttccgg aaagccttcc tcaagatcct gtcttgctga gggagc  MASLSQLSSH INYTCGAENS TGASQARPHA YYALSYCALI LAIVEGNGLV CMAVLKERAL P  QTTTNYLVVS LAVADLLVAT LVMPWVYLE VTGGWNFSR ICCDVFVTL D VNMCTASILN  LCAISIDRYT AVMPVHYQH GTGQSSCRV ALMITAVWVL AFAVSCPILL GFNTTGDPV  CSISNPDEVI YSSWSFYLP FGTVLVYAR IYVLKQRRR KRILTRQNSQ CNSVRPGFPQ  QTLSPDPAHL ELKRYYSICQ DTALGGPGFQ ERGELKREE KTRNSLSPTI APKLSLEVRK  LSNGLRSTSL KLGPLQPRGV PLREKKATQM VAIVLGAFFV CWLPFFLTHV LNTHCQTCHV  SPELYSATW LGYVNSALNP VIYTFNIEF RKAFLKILSC</p>	Homo sapiens
105	1244	Dopamine Receptor D4	NM_000797	<p>atggggaacc gcagcaccgc ggacgcggac ggctgtctgg ctgggcgcgg gcggccgcg A  ggggcatctg cgggggcac tgcggggctg gctgggcagg gcgcggcggc gctggtgggg  ggcgtgctgc tcatcgcg cgtgtctgcg gggaactcgc tctgtgctg gacgtggcc  accgagcgcg cctgcagac gccaccaac tcttctcatg tgagcctggc ggccgcgcg  ctctctctcg ctctcttggg gctgcgctc tctgtctact ccgaggtcca ggtggcgcg  tgctgtctga gccccgcct gtgcgacgc ctcattggcca tggacgtcat gctgtgcacc  gcctccatct tcaacctgtg cgcctacgc gtggacaggt tctgtggcct ggccgtgccc  ctgcgtaca accggcaggg tgggagcgc cggcagctgc tgcctcatcg gccacgtgg  ctgctgtccg cggcgggtgg gcgcgccgta ctgtgcggc tcaacgacgt gcgcggccgc  gaccccgccg tgtgccgctt ggagaccgc gactacgtgg tctactctgc cgtgtgctcc  ttcttcttac cctgccgct catgtgtgtg ctctactggg ccacgttccg cggcctgcag  cgctgggagg tggcacgtcg cgcacaagctg cacggccgcg cgcgcgcgcg acccagcggc  cctggccgc ctccccccac gccaccgcg cccgcctcc cccaggacc ctgcggcccc  gactgtgcgc cccccgcgc cggccttccc cggggtccct gggccccga ctgtgcgcgc  gccgcgcgc gctcccccc ggaccctgc ggcgcgcact gtgcgcgcgc cgcgcgcgcg  ctccccagg acccctgcg ccccgactgt gcgcgcgcgc cgcgcgcct tccccgggt  ccctgcggcc cagactgtg gcccccgcg cccggcctcc cccaggacc ctgcggcccc  gactgtgcgc cccccgcgc cggcctcccc cgggacctc cgggctccaa ctgtgtctcc  cccgacgcgc tcagagccgc cgcgctccca cccagactc cccgcagac ccgcaggagg  cggcgtgcca agatcacgg ccgggagcgc aaggccatga ggtcctgccc ggtggtgtgc  ggggccttcc tctgtgtgtg gacgccccctc tctgtgtgtg acatcacgca ggcgtgtgt</p>	Homo sapiens

106	1244	Dopamine Receptor D4	NP_000788.1	<p> cctgcctgct cctgtccccc ggggtgtgtc aggcctgta cctggctggg ctacgtcaac  agcgccctca acccgtcat ctacactgtc ttcaacgcg agttccgaa cgtcttcgcg  aaggccctgc gtgctgtgtg ctgagccggg caccgccgg cgcctccgg cctgatggcc  aggcctcagg gaccaaggag atggggaggg cgtttttgta cgttaattaa acaaatcct  tccc </p>	Homo sapiens
107	1267	Opioid Receptor, delta 1 (OPRD1)	NM_000911	<p> MGNRSTADAD GLLAGRGPA GASAGASAGL AGQAAAALVG GVLIGAVLA GNSLVCVSV A P  TERALQTPTN SFIVSLAAD LLLALLVLEL FVYSEVQGA WLSPRLCDA LMAMDVMLCT  ASIFNLCAIS VDFEVAVAVP LRYNRQGGSR RQLLLIGATW LLSAAVAAPV LCGLNDVRGR  DPAVCRLEDR DYVYSSVCS FFLPCPLMLL LYWATFRGLQ RWEVARRAKL HGRAPRRPSG  PGPPSPTPA PRLPQDPCGP DCAPPAPGLP RGPCGPDCAP AAPGLPPDPC GPDCAAPPAG  LPQDPCGPD APPAPGLPRG PCGPDCAPPA PGLPQDPCGP DCAPPAPGLP PDCGSGNCAP  PDAVRAAALP POTPPQTRRR RRAKITGRER KAMRVLPLVV GAFLLCWTFP FVHITQALC  PACSVPPRLV SAVTWLGYW SALNPVIYTV FNAEFNRVER KALRACC </p>	Homo sapiens
				<p> ccgaggagcc tgcgtgctc ctggctcaca gcgtccggg cgaggagagc gggcggaccg A  gggggctggg ccggtgctgg cgcgaggga ggcggacgag gcgcagagac agcggggcgg  ccggggcgcg gcacggcgcg ggtcggggcg ggcctctgcc ttgcgctcc cctcgcgtcg  gatcccgcg ccaggcgagc cgggtggagag ggcggcgcg gacgcggga gccatgggaa  cgccccctc cgcggcgcc gagctgcag cccgctctt cgcgaacgcc tcggacgcct  accctagcgc ctccccagc gctggcgcca atgcgtcggg gcgcgaagg ccggggagcg  cctgtccct cgcctggca atgcctaca cgcgctcta ctcggccgtg tgcgcctgg  ggctgctgg caactgtctt gtcatttgc gtcgttcg gtacactaag atgaagacgg  ccaccaacat ctacatcttc aacctggcct tagccgatgc gctggccacc agcacgctgc  ctttccagag tgccaagtac ctgatggaga cgtggccctt cgcgagagctg cctgcaagg  ctgtgcttc catcgactac tacaatatgt tcaccagcat ctcaagctc accatgatga  gtgttgacc ctacatgct gtctgccacc ctgtcaagg cctggacttc cgcacgcctg  ccaaggccaa gctgatcaac atctgtatct cgtccccggg acggtgcagt ggtgtgcatg tccagttcc  tcatggtcat ggtgtgacc cgtccccggg cgttcctggc cgtgtgcatg tccagttcc  ccagcccccag ctggtactgg gacacgggta ccaagatctg cgtgttctc ttcgcttcg  tggtgcccc cctcatcatc accgtgtgct atggcctcat gctgctgcg ctgcgcagtg  tgccctgct gtcgggctcc aaggagaagg accgcagcct gcgggcgac acgcgcagtg  tgctggtgtg tgtggcgcc ttcgtgtgtg tttggcgcc catcacatc ttcgtcatcg  tctggacgt ggtggacatc gacggcgcg acccgctggt ggtggtgctg ctgcacctgt  gcatcgctg ggttacgccc aatagagcc tcaacccctg gctctacgct tctctcgag  agaaactcaa gcgtgcttc cgcagctct cgcgaagcc ctcggcgcc cagacccca  gcagcttcag ccggccccc gaagccagg cccgcgagcg tgtaacgcc tgacccccg  ccgatggtcc cggcggtggc cgtgcgcct gaccaggcca tccggcccc agaccccc  ccctagtgt acccgaggc cacatgagtc ccagtggag gcgcgagcca tgatgtggag  tggggccagt agataggtcg gagggctttg ggaccgccc atggggcctc tgttccggag  acgggaccgg gccgctagat gggcatgggg tggcctctg gtttggggcg aggcagagga  cagatcaatg gcgcagtgc tctggtctg gtgccccgt ccacggctct aggtggggcg  ggaaagccag tgactccagg agaggagcg gacctgtggc tctacaactg agtctttaa </p>	

108	1267	Opioid Receptor, delta 1 (OPRD1)	NP_000902.1	cagggcatct ccaggaaggc gggggttcaa ccttgagaca gcttcgggtt ctaacttggg gccggacttt cggagttggg gggccggggg ccc AVGLLGNVLV MFGIVRYTKM KTATNIYFN LALADALATS TLFQSAKYL METWPFCELL CKAVLSIDYY NMFISIFTLT MMSVDRIYAV CHPVKALDFR TPAKAKLINI CIWVLASGVG VPIMWAVTR PRDGAUVCM L QFPSPSWYWD TVTKICVFLF AFVVPILIT VCYGLMLLRL RSVRLSGSK EKDRSLRIT RMVLVVGAF VWCWAPIHIF VIWTLVDID RRDPLVVAAL HLCIALGYAN SSLNPVLYAF LDENFKRCFR QLCRKPCGRP DPSSFSRPRE ATARERTAC TPSDGPGGGR AA	Homo sapiens
109	1424	Duffy Antigen	NM_002036	gggcctgaac caaacggtgc catggggaac tgtctgcaca ggggtgagtat ggggccaggc A cccagagtc cttatcccta tgcccctcat ttcccctgct gttggcccct cagtccttat atctcttct tttctctctc atcttttctc ccttcccgt ttttctctc tccctcaaag tcttttctc tctctcttc ctatgctagc ctctagctc cctcttggt cctcccttt gcctttgagt cagttccatc ctggtctctt ggtgccttc cttctgacct tgcactgctc ctccagccc agctgcccctg gcttcccag gactgttctt gctcgggctc ttcaggctcc ctgctttgtc ctttccact gtcgcactg catctgactc ctgcagagac cttgttctcc caccgacct tctctctgt cctccctcc cactgccc tcaattccca ggagactctt ccggtgaac tctgatggc tctctgggt atgtctcca ggcggagctc tcccccctca ctgagaactc agtcaagctg gacttgaag atgtatgaa ttcttctat ggtgtgaatg attccttccc agatggagac tatgatgcca ccttggaagc agctgcccc tgccactct gtaacctgct gtagactct gactgccc tcttcatct caccagtgc ctgggtatcc tagctagcag cactgtctc ttcagtctt tcagacctt cttccgctgg cagctctgcc ctggctggc tgcctggca cagctggctg tgggcagtg cctcttcagc attgtggtc ccgtcttggc cccagggcta gtagcactc gcagctctgc cctgtgtagc ctgggctact gtgtctggtg tggctcagc tttgcccagg ccttgctgt aggtgacct gcctccctgg gccacagact ggggtcagc caggtcccag gcctcacct ggggctcact gtgggaattt gggagtggtc tgcctactg acactgctg tcacctggc cagtggtgct tctggtggac tctgcacct gatatacagc acggagctga aggttttga ggcacacac actgtagcct gtcttgccat cttgtcttg ttgccattgg gttgttttg agccaagggg ctgaagaagg cattgggtat ggggccaggc ccttgatga atactctgt ggcctggtt atttctggt ggcctcatgg ggtggttcta gactggatt tctggtgag gtccaagctg ttgctgtgt caacatgtct ggcacagcag gctctggacc tctgtctgaa cctggcagaa gccctggcaa ttttgacct tgtggctacg cccctgctc tgcctctatt ctgcaccag gccaccgca ccctctgccc ctctctgccc ctccctgaag gatggtcttc tcatctggac accctggaa gcaaatccta gttctctcc cactgtcaa cctgaataa agtctacact gcctttgtg NP_002027.1 MASSGYVLOA EISPSTENSS QLDFEDVWNS SYGVNDSFPD GDYDANLEAA APCHSCNLLD P DSALPFFILT SVLGILASST VLFMLFRPLF RWQLCPGWPV LAQLAVGSAL FSIVVPVLAP GLGSTRSSAL CSLGYCVWYG SAFAQALLLG CHASLGHRLG AGQVPGITLG LTVGIWGVAA LLTLPTVLAS GASGGLCTLI YSTELKALQA THTVACLAI FVLLPLGLFGA KGLKKALGMG PGPWNILWA WFIFWPHGV VLGLDFLVR KLLLLSTCLA QQALDLLNL AELAILHCV ATPLLLALFC HQATRTLPS LPLPEGWSSH LDTLGSKS	Homo sapiens

111	1451	EBV-Induced Gene 2	NM_004951	ggaattccct gatatacacc tggaccacca ccaatggata tacaatggc aaacaatttt A actccgccct ctgcaactcc tcagggaat gactgtgacc tctatgcaca tcacagcacg sapiens gccaggatag taatgcctct gcattacagc ctgctcttca tcatgggct cgtgggaaac ttactagcct tggctgctcat tgttcaaac aggaataaaa tcaactctac caccctctat tcaacaaatt tggtgatttc tgatatactt ttaccaccg cttgctctac acgaatagcc tactatgcaa tgggctttga ctggagaatc ggagatgcct tgttaggat aactgcgcta gtgttttaca tcaacacata tgcaggtgtg aactttatga cctgcttgag tattgaccgc ttcattgctg tggtgacccc tctacgctac aacaagataa aaaggattga acatgcaaaa ggcgtgtgca tattgtctg gattctagta ttgtctaga cactccact cctcatcaac cctatgtcaa agcaggaggc tgaaggatt acatgcattg agtatccaaa ctttgaagaa actaaatctc ttccctggat tctgcttggg gcattgttca taggatatgt acttccactt ataatcattc tcattctgta ttctcagatc tctgcacaa ctttcagaac tgccaaacaa aaccactca ctgagaaatc tgggtgaaac aaaaaggctc tcaacacaa tattcttatt attgttgtgt ttgtctctgt ttccacact taccatgttg caattattca acatatgatt aagaagcttc gtttctctaa ttctctgtaa tctagccaaa gacattcgtt ccagatttct ctgcacttta cagtatgcct gatgaactc aattgctgca tggacccttt tatctacttc tttgcatgta aagggtataa gagaaaggtt atgaggatgc tgaacaggca agtcagtga tcgatttcta gtgctgtgaa gtcagccct gaagaaaatt cactgaaat gacagaaacg cagatgatga tacattccaa gcttccaaat ggaagtgaa atggattgta ttttggtta tagtgacgta aactgtatga caaactttgc agacttccc ttataaagca aaataattgt tcagcttcca attagtattc ttttatattt ctttcattgg gcacttccc atctccaact cggaagtaag ccaagagaa caacataaag caaacacat aaagcacaat aaaaatgcaa ataaatattt tcatttttat ttgtaaacga atacacaaa aggaggcgt cttataaact cccaatgtaa aaagtgtgt tttaataaaa aatttcttg ccaacaaaatg gttagaaagg actgaataga ttatatattg ccagatgta atacttttta aataacatat ttcttaaatc caaatttctc tcaatgttag atttaattcc ctcaataaca ccaatgtttt gttttgttc gtctgtggtc ataaaacttt gttaaggaa ctttttgaa taaagagcag gatgctgc 112	1451	EBV-Induced Gene 2	NP_004942.1	MDIQMANFT PPSATPOGND CDLYAHHSTA RIVMPLHYSL VFIIGLVGNL LALVVIVQNR P KINSTTLYS TNLVISDILF TTALPTRIAY YANGFDWRIG DALCRITALV FYINTYAGVN sapiens FMTCLSIDRF IAVVHPLRYN KIKRIEHAKG VCFVWILVF AQTLPPLINP MSKQEAERIT CMEYPNFEET KSLPWILLGA CFIGYVLP LIILICYSQIC CKLFRTAKQN PLTEKSGVKN KALNTIILII VVFLCFTPY HVAIIQHMIK KLFPSNFLEC SQHSFQISL HFTVCLMNFN CCMDPFIYFF ACKGYKRKVM RMLKRQVSVS ISSAVKSAPE ENSREMTETQ MMIHSKSSNG K	1486	Endothelin B Receptor	NM_000115	gagacattcc ggtgggggac tctggccagc ccgagcaacg tggatcctga gagcactccc A aggtaggcat ttgccccggt gggacgcctt gccagagcag tgtgtggcag gccccgtgg aggatcaaca cagtggctga acactgggaa ggaactggta cttggagtct ggacatctga aacttggtc tgaactgcg cagcgccac cggagcctt ctggagcag tagcagcatg cagccgctc caagtctgt cggacgcgc ctggttgcgc tggttctgc ctgcggcctg tcgcggtatc tgggagagga gagaggctc ccgctgaca gggcactcc gctttgcaa
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114	1486	Endothelin B NP_000106.1 Receptor	acatggtgct tttctttcat ctaggagcaa aactgctttt tgagaccgta agaacctctt agctttgtgc gttctgcct aattttata tcttctaagc aaagtgcctt aggatagctt gggatgagat gtgtgtgaaa gatgtacaa gagaaacgg aagagagagg aaatgaggtg gggttgagg aaacctagg ggacagattc ccattcttag cctaacttc gtcatgctt cgtcacatca atgcaaaagg tctgatttt gtccagcaa aacacagtcg aatgttctca gagtacttt cgaataaat tgggccaag agcttaact cggcttaaa atagcccaa attttactt tgttttctt ttaataggct gggccacatg ttggaataa gtagtaatg ttgtttctg tcaatattga atgtgatgt acagtaaac aaaaaccaac aatgtggcca gaaagaaaga gcaataataa ttaattcaca caccatatgg attctattt taaatcacc acaaacttgt tctttaatt catcccaatc acttttcag aggcctgtt tcatagaagt catttagac tctcaattt aaattaattt tgaatcacta atatttcac agtttattaa tatattaat tctatttaa attttagatt attttatta ccatgtactg aattttaca tctgatacc ctttcttct ccatgtcagt atcatgttct ctaattatct tgccaaattt tgaactaca cacaaaaagc atacttgcat tatttataat aaaattgcat tcagtggctt tttaaaaaa atgtttgatt caaaacttta acatactgat agtaagaaa caattataat 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tgaatcacta atatttcac agtttattaa tatattaat tctatttaa attttagatt attttatta ccatgtactg aattttaca tctgatacc ctttcttct ccatgtcagt atcatgttct ctaattatct tgccaaattt tgaactaca cacaaaaagc atacttgcat tatttataat aaaattgcat tcagtggctt tttaaaaaa atgtttgatt caaaacttta acatactgat agtaagaaa caattataat ttctttacat actcaaaacc aagatagaaa aaggtgctat cgttcaact caaaacatgt ttcctagat taaggactt aatatagcaa cagacaaaat tattgttaac atggatgta cagctcaaa gatttataa agattttaac ctatttctc ccttattat cactgcta gtgatgtat gttcaaacac cttttagat tgatagctta catatggcca aggaataaca gtttatagca aaacatgggt atgctgtagc taactttata aaagtgtaat ataacaatgt aaaaaattat atatctgga gattttttg gtgcctaaa gtggctatag ttactgattt tttattatgt aagcaaaacc aataaaaatt taagttttt taacaactac cttattttc actgtacaga cactaatca ttaataacta atgtattgt taaaagaaa ataatgtga caagtggaca ttatttatgt taaatataca attatcaagc aagtatgaag ttattcaatt aaaatgccac atttctggtc tctggg	115	1488	Endothelin A NM_001957 Receptor	gaattcgcg cgcctcttg cggctccaga gtggagtga aggtctggag ctttgggagg A agacggggag gacagactg agcgtgttc ctcggaggtt tcttttttcg tgcgagccct cgcgcgcgcg tacagtcac cgcgtggtc gagattgtg gagaggcgtt ggagaggctt catccatccc acccgtcgt cgcggggat tggggtccc gcgacacct cccgggagaa gcagtggcca ggaagtctt tgaagccggg gaagctgtgc agccgaagc gccgcccgc cggagcccg gacacggcc accctcccg ccccccac tcgctttctc cggcttctc tggccaggc gccgcgcga cccggcagct gtctgcgac gccgagctc acggtgaaa aaaaagtga ggtgtaaaag cagcacaagt gcaataagag atatttctc aaattgctt	114	1486	Endothelin B NP_000106.1 Receptor	acatggtgct tttctttcat ctaggagcaa aactgctttt tgagaccgta agaacctctt agctttgtgc gttctgcct aattttata tcttctaagc aaagtgcctt aggatagctt gggatgagat gtgtgtgaaa gatgtacaa gagaaacgg aagagagagg aaatgaggtg gggttgagg aaacctagg ggacagattc ccattcttag cctaacttc gtcatgctt cgtcacatca atgcaaaagg tctgatttt gtccagcaa aacacagtcg aatgttctca gagtacttt cgaataaat tgggccaag agcttaact cggcttaaa atagcccaa attttactt tgttttctt ttaataggct gggccacatg ttggaataa gtagtaatg ttgtttctg tcaatattga atgtgatgt acagtaaac aaaaaccaac aatgtggcca gaaagaaaga 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ttattcaatt aaaatgccac atttctggtc tctggg	115	1488	Endothelin A NM_001957 Receptor	gaattcgcg cgcctcttg cggctccaga gtggagtga aggtctggag ctttgggagg A agacggggag gacagactg agcgtgttc ctcggaggtt tcttttttcg tgcgagccct cgcgcgcgcg tacagtcac cgcgtggtc gagattgtg gagaggcgtt ggagaggctt catccatccc acccgtcgt cgcggggat tggggtccc gcgacacct cccgggagaa gcagtggcca ggaagtctt tgaagccggg gaagctgtgc agccgaagc gccgcccgc cggagcccg gacacggcc accctcccg ccccccac tcgctttctc cggcttctc tggccaggc gccgcgcga cccggcagct gtctgcgac gccgagctc acggtgaaa aaaaagtga ggtgtaaaag cagcacaagt gcaataagag atatttctc aaattgctt
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116	1488	Endothelin A NP_001948.1	Receptor	<p>gaaaaataat taccacaaa tgccaccagt aactaaacga ttcttcaatt ctgggggttt  tcaagtatga cctaactccc caccacaaca tctccctccc acattgtcac catttcaag  ggccacagt gacttttctt gggcattttc ccagatgttt acagactgtg agtacagcag  aaaatctttt actagtgtgt gtgtgtatat atataaaca ttgtaaattt ctttagccc  atcttctag actgtctctg tggaatatat ttgtgtgtgt gatatgca tgtgtgtgat  ggtatgtatg gatttaactt aatctaataa ttgtgccccg cagtgtgccc aaagtgcata  gtctgagcta aaatctaggt gattgttcat catgacaacc tgctcagtc cattttaacc  tgtagcaacc ttctgcattc ataaatcttg taatcatgtt accattacaa atgggatata  agaggcagcg tgaagcaga tgaagtgttg actagcaata tagggttttt ttggttgggt  tggtttgata agcagttatt tgggttcata ttgtttctctg tgctggagca aaagtcatta  cactttgaag tattatatatg ttcttatcct caattcaatg tggatgataa attgccaggt  tgtctgatat ttctttcaga ctctgccaga cagattgtctg ataataaatt aggtaagata  atttgttggg ccataattta ggacaggtaa aataacatca ggttccagtt gcttgaattg  caaggctaag aagtactgccc cttttgtgtg ttagcagtca aatctattat tccactggcg  catcatatgc agtgatatat gcctataata taagccatag gtccacacca ttttgttttag  acaattgtct ttttttcaag atgctttgtt tctttcatat gaaaaaatg cattttataa  attcagaaaag tcatagattt ctgaaggcgt caacgtgcat tttatttatg gactggtaag  taactgtggt ttactagcag gaatatctcc aatttctacc ttactacat cttttcaaca  agtaactttg tagaaatgag ccagaagcca aggcctgag ttggcagtggt ccataaagt  taaaataaaa gtttacagaa acctt</p>	Homo sapiens
117	1598	Calcium-Sensing Receptor (CASR)	NM_000388	<p>caacaggcac ctggtgtag ccaggaagga ccgcaagccc ttctcgtag gagagtggaa A  ggaggagct gtttgccagc accgaggtct tgcggcacag gcaacgcttg acctgagctt  tgcagaatga aaggcatcac aggagccctc tgcattgatgt ggtttccaaa gactcaagga  ccaccacat tacaagtctg gattgaggaa ggcagaaatg gagattcaaa caccacgtct  tctattattt tattaatcaa tctgtagaca tgtgtcccca ctgacaggag tgaactgctc  caaggagaa acttctggga gcctccaaac tctagctgt ctcatcctt gcctggaga  gacggcagaa ccattggcatt ttatagctgc tgctgggtcc tcttgacct cacctggcac  acctctgctt acgggccaga ccagcgagcc caaaagaag gggacattat ccttgggggg  ctctttccta ttcatttttg agtagcagct aaagtcaag atctcaaatc aaggccggag  tctgtggaat gtatcaggta taatttccgt ggttttcgct ggttacaggc tatgatattt  gccatagagg agataaacag cagcccagcc ctcttccca acttgacgtt ggatacagg  atatttgaca ctgcaacac cgtttcttaag gccttggag ccacctgag tttgtgtgct  caaaacaaa ttgatttctt gaaccttgat gatttctga actgctcaga gcacattccc</p>	Homo sapiens

tctacgattg ctgtggtggg agcaactggc tcaggcgtct ccacggcagt ggcaaatctg  
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118	1598	Calcium-Sensing Receptor (CASR)	NP_000379.1	MAFYSCCWVL	LALTWHTSAY	GPQRAQKKG	DIILGGLFPI	HFGVAAKDQD	LKSRPESVEC	P	Homo sapiens
				IRYNFRGRFW	LQAMIFAIEE	INSSPALLPN	LTLGYRIFDT	CNTVSKALEA	TLSFVAQNKI		
				DSLNLDEFNC	CSEHIPSTIA	VVGATGSGVS	TAVANLLGLF	YIPQVSYASS	SRLLSNKNQF		
				KSFLRTIPND	EHQATAMADI	IEYFRWNWVG	TIAADDDYGR	PGIEKFREEA	EERDICIDFS		
				ELISQYSDEE	EIQHVVEVIQ	NSTAKVIVF	SSGPDLEPLI	KEIVRRNITG	KIWLASEAWA		
				SSSLIAMPQY	FHVVGGTIGF	ALKAGQIPGF	REFLKKVHPR	KSVHNGFAKE	FWEETFNCHL		
				QEGAKGPLPV	DTFLRGHEES	GDRENSSTA	FRPLCTGDEN	ISSVETPYID	YTHLRISYNV		
				YLAVYSIAHA	LQDIYTCPLG	RGLFTNGSCA	DIKKVEAWQV	LKHLRHLNFT	NNMGEQVTFD		
				ECGDLVGNYS	IINWHLSPED	GSIVFEVGY	YNVYAKKGER	LFINEEKILW	SGFSREVPEFS		
				NCSRDCLAGT	RKGIIEGPT	CCFECVECPD	GEYSDETDAS	ACNKCDDDFW	SNENHTSCIA		
				KEIEFLSWTE	PFGIALTLFA	VLGIFLFAFV	LGVIKILFRNT	PVVKATNREL	SYLLLFSLLC		
				CFSSSLFFIG	EPQDWTCLRL	QPAFGISFVL	CISCILVKTN	RVLVFEAKI	PTSFHRKWWG		
				LNQLFLLVFL	CTFMQIVICV	IWLTYAPPSS	YRNQLEDEI	IFITCHEGSL	MALGFLIGYT		
				CLLAAICFFF	AFKSRKLPEN	FNEAKFITFS	MLIFFIVWIS	FIPAYASTYG	KFVSAVEVIA		
				ILAA5FGLLA	CIFENKIYII	LFKPSRNTIE	EVRCSSTAHA	FKVAARATLR	RSNVSRKRSS		
				SLGGSTGSTP	SSSISKSNS	EDFPQPERQ	KQQPLALTO	QEQQQOPLTL	PQQQRSQQQP		
				RCKQKVIKGS	GTVTFSLSFD	EPQKNAMAHG	NSTHQN5LEA	QKSSDTLTRH	QPLLPLOQGE		
				TDLDLTVQET	GLQGPVGGDQ	RPEVEDEPEL	SPALVVSSSQ	SFVISGGGST	VTENVVNS		
119	1676	Formyl Peptide Receptor-Like Receptor	NM_001462	ggcacgagga	acaacctatt	tgcaaggttg	gcgcaaacat	tctgcctga	caggaccatg	A	Homo sapiens
				gacacaggtt	gtagagatag	agatggctct	ggctgtgcat	tcagcagatt	ctgtagatag		
				aattaatagg	acttggatgg	gatttgggtg	agagaaaagt	aaatgaaaga	taagtcttag		
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				cctctatcac	gaagatatgg	agataagaac	caatatggat	ttgcacccac	tgcatattgca		
				gccttgaggt	cataagcatc	ctcaggaaaa	tgaccagggt	gctgtggca	agatggaaac		

120	1676	Formyl Peptide Receptor- Like Receptor	NP_001453.1	caactttctcc actcctctga atgaatatga agaagtgtcc tatgagtctg ctggctacac tggtctgcgg atcctcccat tgggtgtgct tggggtcacc ttgtcctcog gggctcctggg caatgggctt gtgactggg tggctggatt cgggatgaca cgcacagtca ccaccatctg ttacctgaac ctggccctgg ctgacttttc ttboacggcc acattaccat tccatattgt ctccatggcc atgggagaaa aatggccttt tggctgggtc ctgtgtaagt taattcacat cgtggtggac atcaacctct ttggaagtgt ctctctgatt ggtttcattg cactggaccg ctgcatttgt gtcctgcac cagtcctggc ccagaaccac cgcactgtga gtctggccat gaagtgatc gtcggacctt ggattcttgc tctagtccct accctggcag ttttccctctt tttgactaca gtaactattc caaatgggga cacatactgt actttcaact ttgcatcctg gggtggcacc cctgaggaga ggtgaaggt ggcattacc atgctgacag ccagagggat tatccggttt gtcattggct ttagcttgcc gatgtccatt gttgccatct gctatggct cattgcagcc aagatccaca aaaggggcat gattaaatcc agccgtccct tacgggtcct cactgctg tggccttctt tcttcatctg ttggtttccc ttccaactgg ttgcccttct gggcaccgtc tggctcaaa agatgttgtt ctatggcaag tacaaaaatca ttgacatcct ggttaaccca acgagctccc tggccttctt caacagctgc ctcaacccca tgctttacgt ctttgtggc caagacttcc gagagagact gatccactcc ctgccacca gtctggagag ggccctgtct gaggactcag cccaactaa tgacacggct gccaatctg agttctgttc tgacagact gattacagg caatgtgagg atgggggtcag ggatattttg agttctgttc atctaccct aatgccagtt ccagcttcat ctacccttga gtcataattga ggcattcaag gatgcacagc tcaagtattt attcaggaaa aatgcttttg tgcctctgat ttggggctaa gaaatagaca tcagggttac taaaatatta gbtgtatttt ttgttttttg acttctgcct ataccctggg gtaagtggag ttgggaaaata caagaagaga aagaccagtg gggatttcta agacttagat gagatagcgc ataataaggg gaagacttta agtatataag taaaatgttt gctgtagggt ttttatagct attaaaaaaa atcagattat ggaagttttc tctattttt agtttgctaa gattttctg tttcttttct ttacatcatg agtggacttt gcattttatc aaatgcattt tctacatgta ttaagatggt catattattc ttctctttt atgtaaatca ttataaataa tgttcattaa gttctgaatg ttaaaactat cttgaattcc tggaataaac cacacttagt cctgattgac tttaaatatt tatatctcac aggagtgtgt tagaatttct gtgtttatgt ttatatactg ttatttcaat ttttctacta tccctgctaa gttttcatag aaaaaagga acaaagagaa acttgtaatg gtctctgaaa aggaattgag aagtaattcc tctgattctg tttctgtgtg ttatatctt attaaatatt cagaaaaatt c 121	1681	Follicle Stimulating Hormone Receptor	NM_000145	121
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122	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	<p> cagatcatcc aaaaaggtgc attttcagga ttgggggacc tggagaaaat agagatctct  cagaatgatg tcttgagggt gatagaggca gatgtgttct ccaaccttcc caaattacat  gaaattagaa ttgaaaaggc caacaacctg ctctacatca ccctgaggc cttccagaac  cttcccaacc ttcaatatct gtaatatcc aacacaggta ttaagcacct tccagatgtt  cacaagattc attctctcca aaaggtttta cttgacattc agataaact aaacatccac  acaattgaaa gaaattcttt cgtggggctg agctttgaaa gtgtgattct atggctgaat  aagaatggga ttcaagaagt acacaactgt gcattcaatg gaacccaact agatgcagtg  aatctaagcg ataataataa tttagaagaa ttgcctaatt atgttttcca cggagcctct  ggaccagtca ttctagatat ttcaagaaca aggatccatt ccctgcctag ctatggctta  gaaaatctta agaagctgag gccaggctg acttacaact taaaaagct gcctactctg  gaaaagcttg tcgcccctcat ggaagccagc ctacactatc ccagccattg ctgtgccttt  gcaaaactga gacggcaaat ctctgagctt catcaattt gcaacaaatc tattttaagg  caagaagtgg attatatgac tcaggctagg ggtcagagat cctctctggc agaagacaat  gagtcagct acagcagagg atttgaatg acgtacactg agtttgacta tgacttatgc  aatgaagtgg ttgacgtgac ctgtccctct aagccagatg cattcaacc atgtgaagat  atcatggggt acaacatcct cagagtcctg atatgttcta tcagcatcct ggccatcact  gggaacatca tagtgctagt gatcctaact accagccaat ataaactcac agtccccagg  ttccttatgt gcaacctggc ctttgctgat ctctgcattg gaatctacct gctgctcatt  gcatcagttg atatccatac caagagccaa tatcacaact atgccattga ctggcaaaact  ggggcaggct gtgagtctgc tggctttttc actgtctttg ccagtgcctt gtcagtctac  actctgacag ctatacctt ggaagatgg cataccatca cgcattgccat gcagctggac  tgcaaggtgc agtcocgcca tgcgtccagt gtcatgggtga tgggctggat ttttgccttt  gcagctgccc tctttcccat ctttggcatc agcagctaca tgaaggtgag catctgcctg  cccatggata ttgacagccc ttgttcacag ctgtatgtca tgtccctctc tgtgtcctca  gtcctggcct ttgtgggtcat ctgtggctgc tatatccaca tctacctcac agtgcggaac  cccaacatcg tctcctctc tagtgacacc aggatcgcca agcgcattggc catgctcctc  ttcactgact tcctctgcat ggcacccatt tcttctcttg ccatttctgc ctccctcaag  gtgcccctca tcaactgtgc caagcaatg attctgtctg ttctgtttca ccccatcaac  tcctgtgcca acccttctct ctatgccatc ttaccacaaa actttcgag agatttcttc  attctgctga gcaagtgtgg ctgctatgaa atgcaagccc aaatttatag gacagaaact  tcatccactg tccacaacac ccatccaagg aatggccact gctcttcagc tcccagagtc  accagtgggt ccacttacat acttgctcct ctatgcatt tagcccaaaa ctaaaaacaca  atgtgaaaaat gtatctgagt attgaaatgat aatcagctcc ttgcctttga agggatatgtc  acaaggagct gacagtgtct ctacacattt catctaatat aatattctcg gcataccttt  aagggtaaatt ggtcagggaac tattaattcc atgtgatata ttaggaagct gaattattag  taacaacaat aataattaaa gaatgcaata ctgtaaaaaa gcggccgcga att  </p>	Homo sapiens
122	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	<p> MALLVSLLA FLSLGGCHH RICHCNRVF LCQSKVTEI PSDLPNAIE LRFVLTCLR P  IQKAFSGFG DLEKIEISQN DVLEVEADV FSNLPKLHEI RIEKANLLY ITPEAFQNL P  NLQYLLISNT GIKHLPDVHK IHSLOKVLDD IQDNIHITI ERNSFVGLSF ESVILWLKN  GIQEIHNCAF NGTQLDVNL SDNNLEELP NDVFHGASGP VILDISRTI HSLPSYGLEN  LKKLRARSTY NLKKLPFILEK LVALMEASLT YPHCCAFAN WRRQISELHP ICNKSILRQE </p>	



125	1762	Galanin Receptor GalR1	NM_001480	AK	QCLSLVHCCV NPVLVSFINR NYRYELMKAF IFKYSAKTGL TKLIDASRVS ETEYSALEQN	Homo sapiens
					atccccgtag aatcccgctcca gtctctgctc gcgcaccgtg actttctaagg ggcgcgagatt A	
					tcagccgagc tgttttcgcc tctcagttgc agcagagaag cccctggcac ccgactctat	
					ccaccaccag gaagcctccc aaaagagctc tcgccctgtg gacgactcgg aatccccgga	
					aaagccggga gggagtcgga ggcgccagcc cactggggag gtggcgctgg gcgcgcggga	
					tgccggggga gccttctctg caggagcgc acagtgcact gctgcgcgt gggcagtgcg	
					gggaagcgc gcgggaagga gcggctccga gcaacaggtg cagcacgcag ccgctccggg	
					agccagggaa aacgcgcggc gaagatctgg agcggtaagg cggagagaag ggtctttcca	
					cctgcgcggc tgcagcggc ggatccctct tcccaggctc cgtggtcgcg cagcggggcg	
					aggcgcggc gcaggggacc ccagtgtctt cgagatcacc gtccctccc gagaaggctc	
					agctccggc tccgaaccc accctctctc agaaggtcgc ggcgaaaaga cggtgccacc	
					aggcacggc accggatccc cgtcccgct cgtcgcgc tgggggaag ctgagactcc	
					taactcgca ctctccgtg tttgcgcgg gaccctggc cccccccgc cctgtctatc	
					ccgcctccc tcccgcgc cccgcgcgt gcgcgggaca ccccgcggg ccatggagct	
					ggcggtcgg aacctcagc agggaaacgc gactggccg gaccccccg ccccgagcc	
					cgggcgcgtg ttgggcatcg gcgtggagaa ctctgctcag ctggtggtgt tcggcctgat	
					cttcgcgtg ggcgtgctgg gcaacagcct agtgatcacc gtgctggcgc gcagcaagcc	
					gggcaagccg cggagcacca ccaacctgtt cactctaac ctgagcatcg ccgacctggc	
					ctacctgctc ttctgcatcc ccttccaggc caccgtgtac gcgctgccc cctgggtgct	
					ggcgccctc atctgcaagt tcatccacta ctcttccacc gtgtccatgc tggtagcat	
					cttcacctg gccgcgatgt ccgtggaccg ctacgtggcc atcgtgcact cgcggcgctc	
					ctcctccctc aggtgtccc gcaacgcgt gctggcgctg ggctgcatct ggcgcgtctc	
					cattgccatg gcctgcgcgc tggcctacca ccagggcctc ttcacccgc gcgccagcaa	
					ccagacctc tgcgtggagc agtggccga cctcgcacc aagaaggcct acgtgggtgtg	
					caccttcgtc ttgggtacc tgcgtgcgt cctgtctatc tgccttctgt atgccaaagt	
					ccttaatcac ttgcataaaa agttgaagaa catgtcaaa aagctgtaag catccaagaa	
					aaagactgca cagacagtctc tgggtgtgtg tgtggtgttt ggaatctctt ggctgcgcga	
					ccacatcatc catctctggg ctgagtttgg agttttccc ctagcgcgg cttccttct	
					cttcagaatc accgccact gcctggcgta cagcaattcc tccgtgaatc ctatcattta	
					tgcatttctc tctgaaaatt tcaggagggc ctataaaca gtgttcaagt gtcacattcg	
					caaagattca cactgagtg atactaaaga aataaaaagt cgaatagaca cccaccatc	
					aaccaattgt actcatgtgt gataaaagat agagtatcct tatggttgag ttccatata	
					agtggaccag acacagaaac aaacagaatg agctagtaag cgaatgtgca actgtttatc	
					ttaacaagaa ttcaagtcgt ttttaattaaa tcccacgtgt gtaaaaaagt actttgatcc	
					atttaggaaa ttcttaggtc tagtgagaat tatttttcaa ttttatttta gttctaatt	
					atgttttcaga acaaaaagac aatgctgtac agttttattc ctcttcagac atgaaaaggga	
					acatatatat tccatatata tgttcaactc ttcatagatt gtgaactggc ccatcaatat	
					ggtcaggaat atttgagtc tacattttta agccaattta tttagaaaaa aaattttgagc	
					tttaattctt taattttaag agaagtaata ttgtgaacta tgtattttta aatatgatca	
					tgacacaca atgatgaatt ttttgccat ttacatagac atatctatta agtggaagaa	



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126	1762	Galanin Receptor GalR1	NP_001471.1	aggctttctg aagtctgttt gcacaggtgg cattgtctc caattgtagc tagcgcaacg agctttggaa gcctgtcatt atgagataca gtcggtttac ctcaggagtc aattcagtg tgtactggg acctgggatg cagtagtagg cactgttgat tcaaatttat cctgtgaac tggtttata gagttaacaa aacagagtca gagaccactg tcttaacagt ggaagatgca aataagttt tgagaataaa actggatttt gaaattttac attagtactt gacaaaagt ttcattttgc cttgaaatgga acctactaaa aagagagatg aaaaaaatc agcgaggtg atgtagataa taatttctat gggaccataa actagacaga attcagtaag tcacatgaag taatggtcac gcctgtacat aaagcatatt tcatgtttga tttagatgac attcaaaaa aatcatggga ctgaatatat ctgggggtatc ctatcttgta caaatgcagt ctttttcatt aaatttgtaa tgatgtttaa tgaacatttc caccaaacat tatttccctc aaaaatgta atttggggtt aaaccatca ccaattgaat ttcaaatgta gttttcatga caattttata ttgatgtgtg ttacaatga gaaaatggca tgaataatatt aaattgtctt gtatcg	Homo sapiens
127	1808	Gastric Inhibitory Polypeptide Receptor	NM_000164	SKPGKPRSTT NLFILNLSIA DLAYLLFCIP FQATVYALPT WVLGAFICKE IHYFFTVSML VSIPTLAAMS VDRYVAIVHS RRSSIRVSR NALLGVGCIW ALSIAMASPV AYHQGLFHPR ASNQTFCEWQ WPDPRHKKAY VVCTFVFGYL LPHHIIHLWA EFGVFPLTPA SFLFRITAHK LKNSMKSEA SKKTAQTQVL VVVVFGISW LPHHIIHLWA EFGVFPLTPA SFLFRITAHK LKNSMKSEA IIYAFLSENF RKAYKQVFKC HIRKDSHLSL TDENKSRIDT PPSTNCTHV ggcagcgggt gcaggggctg cagagcaag tgaccagag caggactggg gacaggcctg A atcgccctcg cagcaaccag accttcgccc gccctcaga tgactacctc tccgactctg cagctgctgc tgcgctctc actgtgcggg ctgctgtccc agaggcgga gacaggctct aaggggcaga cggcggggga gctgtaccag cgctgggaac ggtaccgcag gtagtgccag gagacctgg cagcgcgga accgcttca ggcctgcctt gtaacgggtc ctctgatag tacgtctgct gggactatgc tgacccaat gccactgcc gtgcgtcctg cccctggtag ctgcccggc accaccatgt ggtgcaggt ttgctctccc gccagtgtgg cagtgtggc caatggggac ttggagaga ccatacaca tgtgagaacc cagagaagaa tgaggccttt ctggaccaaa ggtcatctt ggagcgggtt caggtcatgt acactgtcgg ctactccctg tctctgcca cactgtgtgt agcctgtctc atcttgagtt tgttcaggcg gctacattgc actagaaact atatccacat caactgttc agtcttttca tgcgtcgagc tgcggccatt ctcagccgag accgtctgct acctgacct ggcctctacc ttggggacca ggccttgcg ctgtggaac aggcctcgc tgcctgccc gcggccaga tctgaccca gtactgcgtg ggtgcaact acactggct gctggtggag ggcgtctacc tgcacagtct cctggtgctc gtgggaggt ccgaggagg ccactccgc tactacctc tctcggctg gggggccccc gcgcttttcg tcattccctg ggtgatcgtc aggtacctgt acgagaacac gcagtgtgg gagcgcaacg aagtcaaggc catttggtgg attatacga ccccatcct catgaccatc ttgattaatt tctcatctt tatccgcat cttggcattc tctgtccaa gctgaggaca cggcaaatgc gctgcccggga ttaccggctg aggtgggctc gctccacgt gacgtgggtg ccccgtgctg gtgtccacga ggtgtgtgtt gctcccgta cagaggaaca ggcccgggc gcccgtgctc tcgccaagct cggctttgag atcttctca gctccttcca gggcttctg gtcagcgtcc tctactgctt catcaacaag gaggtgcagt cggagatccg ccgtggctgg caccactgcc gcctgcgcg cagcctgggc gagaggaac gccagctccc ggagcgcgcc	Homo sapiens

128	1808	Gastric Inhibitory Polypeptide Receptor	NP_000155.1	<p>           ttcggggccc tgcctccgg ctccggcccg ggcgaggtcc ccaccagccg cggctgtgctc            tcggggaccc tccagggcc tgggaatgag gccagccggg agtgggaaag ttactgctag            gggcggggat cccgtgtct gttcagttag catggattta ttgagtcca actgcgtgcc            agggccagta cggaggacgc tggggaatg gtgaaggaaa cagaaaaag gtccctgcc            ttctggagat gacaactgag tggggaatg agaccgtgaa cacaatacat caagtccac            acacgtatg gaatggttat gaagggaagc gagaaggggg cctagggttg tctgggagc            gtctccaaag agtgacact taagccatcc ccgaaagagc tgaagagat cactttgggg            agagctggag aacaggattc taggcggaag cgatagcata ggcaaggcc ctggggcagg            aaggcgctca gcctggctg gagtagaatt aagtcagagc caacaggttg gggagagaca            gagaagtggg caggggcacc caagttggga tttcatttca ggtgcattgg agattcttag            gagtgtctct tgggggtaat attttattt ttaaaaaatg aggat         </p>	Homo sapiens
129	1813	Gastrin- Releasing Peptide Receptor	NM_005314	<p>           cagatttcta aatatcagga aagacgcgtg gggaaaaatag caggccaaaa gtcttagta A            aactgcagcc agggagactc agactagaat ggaggtagaa agaactgatg cagagtgggt            ttaattctaa gccttttgtt ggctaagttt tgtgtgtgtt aacttattga attagagtt            gtattgcact ggtcatgtga aagccagagc agcaccagtg tcaaaatagt gacagagagt            ttggaatacc atagttagta tatatgtact cagagtattt ttattaaaga aggcaaaag            ccggcatag atcttattt catcttact caggttgcaaa atcaatagtt aagaaatagc            atctaaggga acttttaggt gggaaaaaaa atctagagat ggtctaaat gactgttcc            ttctgaactt ggaggtggac catttctgc actgcaacat ctccagtcac agtgcggatc            tccccgtgaa cgatgactgg tcccaccccg ctcatctcta tgtcatcct gcagtttatg            gggttatcat tctgataggc ctcatggca acatcacttt gatcaagatc ttctgtacag            tcaagtccat gcgaaacgtt ccaaacctgt tcatttccag tctggctttg ggagacctgc            tcctcctaata acgtgtgtc ccagtggatg ccagcaggta cctggctgac agatggctat            ttggcaggat tggctgcaaa ctgatccct ttatacagct tacctctgtt ggggtgtctg            tcttcacact cagggcgctc tcggcagaca gatacaaaag cattgtccgg ccaatggata            tccaggcctc ccattgccctg atgaagatct gactcaaaag cgcctttatc tggatcatc            ccatgtgtgt gccattcca gagggcgtgt tttctgacct ccatcccttc catgaggaaa            gcaccaacca gaccttcatt agctgtgccc catacccaca ctctaagtag ctccaccca            aaatccattc tatggcttcc tttctgtgtc tctacgtcat ccactgtcg atcatctcg            tttactacta ctctattgtc aaaaatctga tccagagtgc ttacaatctt cccgtggaag            ggaatataca tgtcaagaag cagattgaat ccgggaagc acttgccaag acagtgtcg            tgtttgtggg cctgttcgcc ttctgtggc tcccaatca tgtcatctac ctgtaccgt            cctaccacta ctctgaggtg gacacctcca tgtccactt tgtccacagc atctgtgccc         </p>	Homo sapiens

130	1813	Gastrin- Releasing Peptide Receptor	NP_005305.1	<p> MALNDCCFLIN LEVDHFHCHN ISSHSADLPV NDDWSHPGIL YVIPAVYGV ILLIGLIGNIT P  LIKIFCTVKS MRNVNLFIS SLALGDLILL ITCAPVDASR YLADRWLFGR IGCKLIPFIQ  LTSVGVSFT LTALSADRYK AIVREMDIQA SHALMKICLK AAFIWIISML LAIPEAVFSD  LHPFHEESTN QTFISCAPY HSNEHPKIH SMASFLVFYV IPLSIISVY YFIAKNLIQS  AYNLPVEGNI HVKKQIESRK RLAKTVLVFV GLFAFCWLPN HVIYLYRSYH YSEVDTSMHLH  FVTSICARLL AFTNSCVNPF ALYLLSKSFR KQFNTQLLCC QPGLIIRSHS TGRSTTCMTS  LKSTNPSVAT FSLINGNICH ERYV </p>	Homo sapiens
131	1814	Cholecystoki nin B Receptor	NM_000731	<p> atggagctgc tcaagctgaa cggagcgtg cagggaaacg gacccgggcc gggggcttcc A  ctgtgcgcc cgggggcgcc tctctcaac agcagcagt tgggcaacct cagctgcgag  ccccctgca ttccgaggc cgggacacga gaattggagc tggccattag aatcactctt  tacgcagtga tctctctgat ggcgttggg ggaatatatgc tcatcatcgt ggtccctggga  ctgagccgcc gctgaggac tgtcaccat gcctctctcc tctcactggc agtcagcgac  ctctgctgg cgtggcttg caagcggtt tctacacctc accctctgc ccaatctcat gggcacattc  atctttggca cgtcatctg catcgactg gagcggtaca ggcacctctg ccgacctg  tccacgctaa gctcgtggc cgtctccac gcgctccac ggcgtctcg tgattgtagc cagtggtctg  caggcacgag tgtggcagac gcctacccc gcctacccc gtgtacactg tctgtgcaac agtggggcct  ctgtccggac tactcatggt gcctacccc tcgctggccc agtgcgcggg tccgcccagac ctggtccgta  cgtgtgctgc agtgcgtgca tcgctggccc ggtgtggtta tggccgtggc ctacgggctt  ctgtgcttc tgccttgtt ctccatccc ggtgtggtt tttgacggcg acagtgcag cgacagccaa  atctctcgc agctctactt agggcttcgc tttgacggcg acagtgcag cgacagccaa  agcagggtcc gaaaccaagg cgggctgcca ggggctgttc accagaaagg gcgttgccgg  cctgagactg gcgcggttg cgaagacagc gatggctgct acgtgcaact tccacgttcc  cggcctgccc tggagctgac ggcgtgacg gctccaggcg cgggatccgg ctcccggccc  accaggcca agctgctggc taagaagcgc gtggtgcgaa tgtgtctggt gatcgttgtg  cttttttttc tgtgttggt gccagtttat agtgccaaca cgtggcgcg ctttgatggc  ccgggtgcac accgagcact ctcgggtgct cctatctct tcatcactt gctgagctac  gctcggcct gtgtcaacc cctgtgtctac tgcctcatgc accgtcgctt tcgccaggcc  tgctgggaaa ctgtcgctcg ctgtgcccc cggcctccac gagctcgccc cagggtcttt  ccgatgagg accctccac tccctccatt gctcgtctg ccaggcttag ctacaccac  atcagcacac tgggcccctg ctgaggagta gaggggcccgt gggggttgag gcagggcaaa  tgacatgcac tgaccttcc agacatagaa aacacaaacc acaactgaca caggaaacca  acacccaaag catggactaa ccccaacgac aggaagaggt agcttacctg acacaagagg  aataagaatg gacagtaga tgggaaagga ggcagcctc tgatatgga ctgagcctgg  cccatagaaa catgacactg acctggaga gacacagcgt ccctagcagt gaactattc </p>	Homo sapiens

132	1814	Cholecystoki nin B Receptor	NP_000722.1	<p> tatacagtgg gaactctgac aagggctgac ctgcctctca cacacataga ttaatggcac  tgattgtttt agagactatg gagcctggca caggactgac tctgggatgc tctagtgtg  acctacagt gaccttccc aatcagcact gaaaatacca tcaggcctaa tctcatacct  ctgaccaaca ggtgtttctg cactgaaaag gttcttcac cttttccagt taaggaccgt  ggccctgccc tctcttctt tcccaaatg tcaagaaaat aataaatgt ttggcttctt  cctgaaaaaa aaaaaaaaaa aaaaaaaaaa aggaatttc  MELLKLNRSV QGTGPGPGAS LCRPGAPLIN SSSVGNLSCE PPRIGAGTR ELELAIRITL P  YAVIFMSVG GNMLIIIVLG LSRRRLRTVN AFLLSLAVSD LLLAVACMPF TLLPNLMGTF  IFGTVICAV SYLMGVSVSV STLSIVAIAL ERYSAICRPL QARVWQTRSH AARVIVATWL  LSGLLMVYP VYTVVQPVGP RVLCQVHRWP SARVRQTWSV LLLLLLFFIP GVMMAVAYGL  ISRELYLGLR FDGSDSDSQ SRVRNQGLP GAVHQNGRCR PETGAVGEDS DGCYVQLPRS  RPALELTALT APGPGSGSRP TQAKLLAKKR VVRMLLVIV LFFLCWLPVY SANTWRAFDG  PGAHRAALSGA PISFIHLISY ASACVNPLVY CFMHRFRQA CLETCARCCP RPPRARPRAL  PDEDPTPSI ASLSRLSYTT ISTLGGP  ggatctggca gcgcgcgcaa gacgagcgtt caccggcgcc cgacccgagc gcgccagag A  gacggcggg agccaagccg acccccgagc agcgccgccc gggccctgag gctcaaaggg  gcagcttcag gggaggacac cccactggcc aggacgccc aggtctgtct gctctgccac  tcagctgccc tggaggagc gtacacacac accaggactg cattgcccc gtgtgcagcc  cctgccagat gtggaggca gctagctgccc cagaggcatg ccccccctgc agccacagcg  accctgctg ctgttctgc tctgtctggc ctgccagcca caggtccccc ccgctcaggt  gatggacttc ctgtttgaga agtggaaagt ctacggtagc cagtgccacc acaacctgag  cctgtgccc cctccacagg agtgggtgtg caacagaaac ttcgacaaat attcctgctg  gccggacacc cccgccaata ccacggccaa catctcctgc cctgggtacc tgccttgcca  ccacaaagt caacacgctt tctgtttcaa gagatgcggg cccgacggtc agtgggtgcg  tggaccccg ggcagcctt ggcgtgatgc ctcccagtc cagatggatg gcgaggagat  tgaggtccag aaggaggtgg ccaagatgta cagcagcttc caggtgatgt acacagtggg  ctacagcctg tccctggggg cccctgctct cgccttgccc atcctggggg gcctcagcaa  gctgcactgc accgcaatg ccatccacgc gaatctgtt gcgtccttcg tgctgaaagc  cagctccgtg ctggtcattg atgggctgct caggacccc tacagccaga aaattggcga  cgacctcagt gtcagcacct ggctcagtga tggagcgggt gcctggctgcc gtgtggccgc  ggtgttcatt caatatggca tctgtggccaa ctactgctgg ctgctgggtg agggcctgta  cctgcacaa cctgtgggccc tggccacctt ccccgagagg agcttcttca gcctctacct  gggcatcggc tggggtgccc ccatgctgtt cgtcgtcccc tgggcagtgg tcaagtgtct  gttcgagaa gtcagtgctt ggaccagcaa tgacaacatg ggcttctggt ggatcctgcg  gttccccgtc tctctggcca tcttgatcaa cttcttcac ttcgtccgca tcttcaagct  gctcgtggcc aagctgcggg cagggcagat gcacacaca gactacaaat tccggtggc  caagtcacg ctgacctca tccctctgct gggcgtccac gaagtggctt ttgccttcgt  gacggacgag cagccacag gcacctgcg ctccgcaaag ctcttcttcg accttctct  cagctccttc caggccctgc tgggtggctgt cctctactgc tctctcaaca aggaggtgca  gtcggagctg cggcggcggtt ggcacccgtg gcgcctgggc aaagtgtctat gggaggagcg  gaacaccag aaccacaggg cctcatcttc gcccggccac gcccctccca gcaaggagct </p>	Homo sapiens
133	1834	Glucagon Receptor	NM_000160	<p> gacggcggg agccaagccg acccccgagc agcgccgccc gggccctgag gctcaaaggg  gcagcttcag gggaggacac cccactggcc aggacgccc aggtctgtct gctctgccac  tcagctgccc tggaggagc gtacacacac accaggactg cattgcccc gtgtgcagcc  cctgccagat gtggaggca gctagctgccc cagaggcatg ccccccctgc agccacagcg  accctgctg ctgttctgc tctgtctggc ctgccagcca caggtccccc ccgctcaggt  gatggacttc ctgtttgaga agtggaaagt ctacggtagc cagtgccacc acaacctgag  cctgtgccc cctccacagg agtgggtgtg caacagaaac ttcgacaaat attcctgctg  gccggacacc cccgccaata ccacggccaa catctcctgc cctgggtacc tgccttgcca  ccacaaagt caacacgctt tctgtttcaa gagatgcggg cccgacggtc agtgggtgcg  tggaccccg ggcagcctt ggcgtgatgc ctcccagtc cagatggatg gcgaggagat  tgaggtccag aaggaggtgg ccaagatgta cagcagcttc caggtgatgt acacagtggg  ctacagcctg tccctggggg cccctgctct cgccttgccc atcctggggg gcctcagcaa  gctgcactgc accgcaatg ccatccacgc gaatctgtt gcgtccttcg tgctgaaagc  cagctccgtg ctggtcattg atgggctgct caggacccc tacagccaga aaattggcga  cgacctcagt gtcagcacct ggctcagtga tggagcgggt gcctggctgcc gtgtggccgc  ggtgttcatt caatatggca tctgtggccaa ctactgctgg ctgctgggtg agggcctgta  cctgcacaa cctgtgggccc tggccacctt ccccgagagg agcttcttca gcctctacct  gggcatcggc tggggtgccc ccatgctgtt cgtcgtcccc tgggcagtgg tcaagtgtct  gttcgagaa gtcagtgctt ggaccagcaa tgacaacatg ggcttctggt ggatcctgcg  gttccccgtc tctctggcca tcttgatcaa cttcttcac ttcgtccgca tcttcaagct  gctcgtggcc aagctgcggg cagggcagat gcacacaca gactacaaat tccggtggc  caagtcacg ctgacctca tccctctgct gggcgtccac gaagtggctt ttgccttcgt  gacggacgag cagccacag gcacctgcg ctccgcaaag ctcttcttcg accttctct  cagctccttc caggccctgc tgggtggctgt cctctactgc tctctcaaca aggaggtgca  gtcggagctg cggcggcggtt ggcacccgtg gcgcctgggc aaagtgtctat gggaggagcg  gaacaccag aaccacaggg cctcatcttc gcccggccac gcccctccca gcaaggagct </p>	Homo sapiens

134	1834	Glucagon Receptor	NP_000151.1	<p> MPPCQQRPL LLLLLLACQ PQVPSAQVMD FLFEKWKLYG DQCHNLSLL PPPTLVCNR P  TFDKYSCWPD TPANTTANIS CPWYLPWHHK VQHRFEVKRC GPDGQWVRGP RGQWRDASQ  CQMDGEEIEV QKEVAKMYSS FQVMYTVGYS LSLGALLLAL AILGLSKLH CTRNAIHANL  FASFVLKASS VLVIDGLLRT RYSQKIGDDL SVSTWLSGDA VAGCRVAADF MQYGIVANYC  WLLVEGLYLH NLLGLATLPE RSFFSLYLG I GWGAPMLFV PWAUVKCLFE NVQCWTSNDN  MGFWWILRFP VFLAILINFF IFVRIVQLIV AKLRARQMHF TDYKFRILAKS TLTLLPLLGV  HEWVFAFVTD EHAQGTLRSA KLFFDLFLSS FQGLLVAVLY CFLNKEVQSE LRRRWHRWRL  GKVLWEERN T SNHRASSPG HGPPSKELQF GRGGGSDSS AETPLAGGLP RLAESEPF </p>	Homo sapiens
135	1925	Gonadotropin -Releasing Hormone Receptor	NM_000406	<p> gcagtttggg aggggtggtg gcagccagga ttcatctgag gagacccccct tggctgggtgg  ctccctaga ttggctgaga gcccttctg aacctgctg ggacccccagc tagggctgga  ctctggcacc cagagcgctc gctggacaac ccagaactgg acgccccagct gaggtggggg  gcgggggagc caacagcagc cccacctac ccccccccc cagtgtggct gtctgcgaga  ttgggctctc tctccctgca cctgcttctg cctgggtgca gaggtgagca gagagtgcca  ggcggggagt gggggtgctg ccgtgaactg cgtgccagtg tccccacgta tctcggcacg  tcccatgtgc atggaaatgt cctccaacaa taaagagctc aagtggctac cgtg  atatttagat aattataaaa accaaggcaa taattataaa actgattaac cgttttactc  taacttaagc atggattgga tcagtaagat tgattaataa attgaatgc agtcagttgg  attgattcta attaaagt ttaatttgtt gtagaataat ttaagtga tataattgtc  cagtggtcga gtgtgttga gtgtgttga aaaggaaaac aaagaatgtt ttgagaatgt  gttaattcct taagacaatg gattttaatt ggatctgttg ttttcatttt tcttcattat  cattatacat ctgtatgttg gacagaacac taactataaa tagtttttag aaagtgtttt  ttgaagttaa ttaaatcata atatcatgac tgacttttga attcaaaatt aggcgtgac  tacccttctt cacttaggaa gagtggtgtg aaagccagac catctgtgta ggtgctacag  ttacatgtgg cctcagaat gcgtttggcc tgctctgttt tagcaactctg ttggattacc </p>	Homo sapiens

136	1925	Gonadotropin NP_000397.1 -Releasing Hormone Receptor	aatacacaaa acaagttaac ctttgatctt tcacattaag tatctcaggg acaaaatttg acatacgtct aaacctgtga cgttccatc taaagaaggc agaaataaaa catggacttt agattcgggt acaataaaat atcagatgca ccagagacac aaggcttgaa gctctgtcct gggaaaatat ggcaaacagt gcctcctctg aacagaatca aaatcacatgt tcagccatca acaacagcat cccactgatg cagggaaccc tcccactct gacctgtctt ggaagatcc gagtgcggt tactttcttc cttttcttgc tctctcgac ctttaaatgct tctttcttgc tgaaccttca gaagtggaca cagaagaaaag agaaaggga aaagctctca agaataaagc tgctcttaaa acatctgacc ttaggcaacc ttgtggagac tctgattgtc atgccactgg atgggatgtg gaacattaca gtccaatggt atgctggaga gttactctgc aaagtctca gttatctaaa gcttttcttc atgtatgccc cagccttcac gatggtggtg atcagcctgg accgctccct ggctatcacg aggcccttag ctttgaaaag caacagcaaa gtcgacacgt ccatggttgg cctggcctgg atcctcagta gtgtcttgc aggaccacag ttatacatct tcaggatgat tcatctagca gacagctctg gacagacaaa agtttctct caatgtgtaa cacactgcag tttttcaca ttgtggcacc aagcatttta taacttttt accttcagct gcctcttcat catcctctt ttcatcagc tgatctgcaa tgcaaaaatc atcttcaccc tgacacgggt ccttcatcag gacccccag aactacaact gaatcagtc aagaacaata taccagagc acggctgaag actctaaaaa tgacgggtgc attgcccact tcatttactg tctgctggac tccctactat gtccataggaa ttgtgtattg gttgatcctt gaaatgtaa acaggttctc agaccacgta aatcacttct tcttctctt tgccctttta aaccatgct ttgatccact tatctatgga tattttctc tgtga	1945	Opsin, green- sensitive	atggcccagc agtggagcct ccaaaggctc gcaggccgc atccgcagga cagctatgag A gacagcacc agtcacagcat cttcacctac accaacagca actccaccag aggcccttc gaaggccga attacacat cgtcccca cgttttcaca aatgggcttg tgctggcgc caccatgaag atctttgtgg tcaattgcac cgttttcaca aatgggcttg atcctgtga acctggcgt cgctgacctg ttcaagaagc tgcgccacc cctgaactgg cactatcag gttgtgaac aggtctatgg ctactctgtg gcagagaccg tcatcgccag cctggagggc tacaccgtct cctgtgtgg gatcacaggt ctgggccacc ctatgtgtgt cctggagggc agatggatgg ttggtctgcaa gccctttggc ctctgtctc tggccatcat ttcctgggag gtgggcatgg ccttctctg gatctgggct aatgtgagat ttgatgcaa gctggccatc catctttggt tggagcaggt actggccca cggcctgaag gctgtgtgga cagccccgc catctttggt tggagcaggt agctcgtacc ccggggtgca gtctacatg acttcatgag gccagacgt gttcagcggc cactcagca tcatcgtgct ctgtacctc attgtcctca tggtaacctg ctgcacacc cactcagca tcatcgtgct ctgtacctc caagtgtggc tggccatccg agcgggtggca aagcagcaga aagagctga atccaccag aaggcagaga aggaagtgc gcgcatgggt gtggtgatgg tctggcatt ctgtctctgc tggggaccat acgctctctt cgcattgctt gctgctgcca accctggcta cccctccac	137	1945	Opsin, green- sensitive	atggcccagc agtggagcct ccaaaggctc gcaggccgc atccgcagga cagctatgag A gacagcacc agtcacagcat cttcacctac accaacagca actccaccag aggcccttc gaaggccga attacacat cgtcccca cgttttcaca aatgggcttg tgctggcgc caccatgaag atctttgtgg tcaattgcac cgttttcaca aatgggcttg atcctgtga acctggcgt cgctgacctg ttcaagaagc tgcgccacc cctgaactgg cactatcag gttgtgaac aggtctatgg ctactctgtg gcagagaccg tcatcgccag cctggagggc tacaccgtct cctgtgtgg gatcacaggt ctgggccacc ctatgtgtgt cctggagggc agatggatgg ttggtctgcaa gccctttggc ctctgtctc tggccatcat ttcctgggag gtgggcatgg ccttctctg gatctgggct aatgtgagat ttgatgcaa gctggccatc catctttggt tggagcaggt actggccca cggcctgaag gctgtgtgga cagccccgc catctttggt tggagcaggt agctcgtacc ccggggtgca gtctacatg acttcatgag gccagacgt gttcagcggc cactcagca tcatcgtgct ctgtacctc attgtcctca tggtaacctg ctgcacacc cactcagca tcatcgtgct ctgtacctc caagtgtggc tggccatccg agcgggtggca aagcagcaga aagagctga atccaccag aaggcagaga aggaagtgc gcgcatgggt gtggtgatgg tctggcatt ctgtctctgc tggggaccat acgctctctt cgcattgctt gctgctgcca accctggcta cccctccac	Homo sapiens	Homo sapiens
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138	1945	Opsin, green- sensitive	NP_000504.1	<p>MAQQWSLQRL AGRHPQDSYE DSTQSSIFTY TNSNSTRGPF EGPNYHIAPR WYHHLTSVWM P  IFVVIASVFT NGLVLAATMK FKKLRHPLNW ILVNLAVALD AETVIASSTIS VMNQVGYFV  LGHPMCVLEG YTVSLCGITG LWSLAIISWE RWMVVCCKPFG NVREDAKLAI VGIAFSWIWA  AWTAPPPIFG WSRYPHGLK TSCGPDVFSG SSYPGVQSYM IVLMVTCCIT PLSIIVLCYL  QVWLAIKRAVA KQKSESESTQ KAEKEVTRMV VMVLAFCFC WGPYAFFACF AAANPGYPFH  PLMAALPAFF AKSATIYNPV IYVFMNRQFR NCILQLFGKK VDDGSELSSA SKTEVSSVSS  VSPA</p>	Homo sapiens
139	1951	Growth Hormone Secretagogue Receptor	NM_004122	<p>atgttgaacg cgacgcccag cgaagagcgg gggttcaacc tcacactggc cgacctggac A  tgggatgctt cccccggcaa cgactcgtcg ggcgacgagc tgctgcagct ctcccccgcg  ccgctgctgg cggcggtcac agccacctgc gtggcactct tcgtggtggg tategctggc  aacctgctca ccaatgctgtt ggtgtcggc ttccgagagc tgcgcaccac caccacacctc  tacctgtcca gcaatggcctt ctccgactcg ctcatcttcc tctgcatgcc cctggacctc  gttcgcctct ggcagtaccg gccctggaac ttccggcgacc tctctgcaa actcttccaa  ttcgtcagtg agagctgcac ctacgccacg gtgctcacca tcacagcgtt ggcgtcagag  cgctacttcg ccaatctgctt cccactccgg gccaaagtggt tggtcaccaa gggcggggtg  aagctgggtca tctctgctcat ctggggcctg gccctctgca gcgcggggcc catctctctg  ctagtcgggg tggagcacga gaacggcacc gaccttggg acaccaacga gtcccgcccc  accgagtgtt cgttgcgtc tggactgctc acggtcagtg tctggtgtgc cagcatcttc  ttcttcttc ctgtctcttg tctcaggtc ctctacagtc tcacggcag gaagctgttg  cggaggaggc gcggcgatgc tgtcgtgggt gccctcgctca gggaccagaa ccacaagcaa  accgtgaaaa tgcgtgggtgg gtctcagcgc gcgctcaggc ttctctcgcg gggctcctatc  ctctccctgt gccctctccc ttctctctga</p>	Homo sapiens
140	1951	Growth Hormone Secretagogue Receptor	NP_004113.1	<p>MWNATPSEEP GFNLTLADLD WDASPGNDSL GDELLQLFPA PLLAGVTATC VALFVVGIAG P  NLLTMLVVR FRELRTTNL YLSSMAFSDL LIFLCMPDL VRLWQYRPN FGDLLCKLFQ  FVSECTYAT VLTITALSVE RYFAICFPLR AKVWTKGRV KLVIFVIWAV AFCAGPIFV  LVGVEHENG DPWDNECRP TEFAVRSGLL TMVWVSSIF FFLPVFCLTV LYSLIGRKLW  RRRGDAVVG ASLRQNHKQ TVKMLGGSQR ALRLSAGPI LSLCLLPSL</p>	Homo sapiens
141	1954	Growth Hormone- Releasing Hormone Receptor	NM_000823	<p>agcagccaag gcttactgag gctggtggag ggagccactg ctgggctcac catggaccgc A  cggatgtggg gggccacagt ctctcgcgt ttgagccctg taccgacctg attgggccac  atgcacccag aatgtgactt catcaccag ctgagagagg atgagagtc ctgtctacaa  gcagcagagg agatgcccaa caccacctg ggctgccctg cgacctggga tgggctgctg  tgctggccaa cggcaggctc tggcgagtgg gtcacctcc cctgccgga ttcttctct  cacttcagct cagagtcagg gctgtgaaa cgggattgta ctatcactgg ctggctgag  ccctttccac cttacctgt gccctgccct gtgcctctgg agctgctggc tgaggaggaa  tcttacttct ccacagtga gattatctac accgtgggcc atagcatctc tattgtagcc  ctcttcgtgg ccatcaccat cctgggtgct ctgaggaggc tccactgcc ccggaactac  gtccacaccc agctgttcac cactttatc ctcaaggcgg gacgtgtgtt cctgaaggat</p>	Homo sapiens

142	1954	Growth Hormone- Releasing Hormone Receptor	NP_000814.1	MDRRMWGAHV FCVLSPLPTV LGHMPECDF ITQLREDESA CLQAAEEMPN TTLGCPATWD P GLLCWPTAGS GEWTLPCPD FFSHFSESG AVKRDCITIG WSEPFPPYPV ACPVPLELLA EEESYFSTVK IITYVGHIS IVALFVAITI LVALRRLHCP RNYVHTQLFT TFIKAGRVE LKDAALFHS DTDHCSFSTV LCKVSVAAASH FATMTNFSWL LAEAVYINCL LASTSPSSRR AFWWLVLAGW GLPVLFTGTW VSKLAFEDI ACWDLDDTSP YWWIIKGPV LSVGVNFGLF INIIIRILVRK LEPAQGSLLHT QSQYWRLSKS TLFILIPLEGI HYIIFNPLPD NAGLGIRLPL ELGLGSFQGF IVAILYCFIN QEVRTSIRK WHGHDPELLP AWRTRAKWTT PPSRAAKVLT SMC	Homo sapiens
143	2120	Histamine H1 Receptor	NM_000861	caggagagaca tacaggattt aagaagccca tcattggagaa gaccttcaat tacagagata A aaaagtthttt cttgtggaac aagttaaac tagatggcag ataacagact gaggagtgag ctgcttctga ctgattaaa agggagtgga gccataactg gggctgctc ttgcgccaat gagcctccc aattctcct gcctcttaga agacaagatg tgtgaggga acaagaccac tatggccagc cccagctga tgcccttggt ggtggtcctg agcactatct gcttggtcac agtagggtc aacctgctg tgctgtatgc cgtacggagt gagggaagc tccacactgt ggggaacctg tacatcgtca gcctctcgtt ggcggacttg atcgtgggtg ccgtcgtcat gcctatgaac atcctctacc tgctcatgic caagtgggtca ctgggcccgc ctctctgcct cttttgctt tccatggact atgtggccag cacagcgtcc attttcagtg tcttcatcct gtgcattgat cgctacgct ctgtccagca gccctcagg taccttaagt atcgtaacaa gaccgagcc tggccacca ttctgggggc ctggtttctc tctttctgt gggttattcc cattctaggc tggaaatcact tcattgcagca gacctcgggt cgccgagagg acaagtgtga gacagacttc tatgatgtca cctgggttcaa ggtcatgact gccatcata acttctacct gccacacttg ctcatgctct ggttctatgc caagatctac aaggccgtac gacaacactg ccagcacgg gagtcatca ataggctcct ccttctcttc tcagaaatta agctgaggcc agagaacccc aagggggatg ccaagaaacc aggaaggag tctcctctggg aggttctgaa	Homo sapiens



aaggaaagcca aaagatgctg gtggtggatc tgttgtgaag tcacatccc aaacccccaa  
ggagatgaaa tcccagttg tcttcagcca agagatgat agagaagtag acaactcta  
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ctttaacccc aaatttctt tggctattaa aaaagtgggt gcaaaaggca tcccaaaag  
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gagagaggta ccaagggtca catagctagt tatgtgagaa agttagagta cagatcctct  
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tttgtgttc ctctttgcat gatctgtcaa agtgagatat tttacctgc ctaaaatatg

144	2120	Histamine H1 Receptor	NP_000852.1	MSLPNSSCLL VGNLYIVSL LCIDRYRSVQ ETDFYDVTWF PENPKGDAKK YCFPLDIVHM TDSDDTTTETA MAAFILCWIP RILHRS	EDKMEGNKT VADLIVGAW QPLRYLKVRT KMTALINFY PGKESPWEVL QAAEGSSRD PGKGLRSGS YFIFWVIAF CNCCNEHLH	TMASPOLMPL KTRASATILG LPTLLMLWFY AKIYKAVROH SVLKPSQTP YAVNRSRSHGQ NTGLDYIKFT MFTIWLGYIN	TVGLNLLVLY SKWSLGRPLC AWFLSFLWVI CQRELINRS KEMKSPVVF LKTDEQGLNT YVSGLHMNRE STLNPLIYPL	AVRSERKLHT STASIFSVEI QTSVRREDKC LPSFSEIKLR QEDDREVDKL MLGDSQSFSR RKAAKQLGFI CNENFKKTFK	Homo sapiens
145	2121	Histamine H2 Receptor	NM_022304	ctctgccc tggagcagg atgacaccaa gacctaccc tgatccatga caacacctta gaagccttcc tctgttgga gcaaccagg acagcctctt gcggtcctca aaccgcggc ctcctcggc tttggaagg attcttaacc taccctgtgc tccattaccc aagggaatc gatgggctgg ttcaaggctc accatcagg tgctggtttc aatgaggtgt atcctgtatg	ccactgactc caccagctat agccaccggc agccccggga acctggcctc gaagtggttg ccacccccctg gcttgagtc gccctgatca ccttttgctt tcctcatcac tccgcaacct tcctggtgct tcttctgcaa tcttcatgat tggtcacccc tgtcctttct ataccacctc tcaccttcta cccggtatca agcaaaaagc cctacttcac tagaagccat ctgcgctgaa	cagagaggga ggagagggat agacagtgc ggaagctagc gagccctgc cttaatttat gccaaaaaaa cagtggttg gggactgag ggactctacc cgttgctggc gacctattgt gcccttctct tatctacacc cagcctcgac agttcgggtc gtctatccac tgctatccac atccacctc cctcccgcta ggccaagagg cacagtaca cgcgtttgtg cgttctgtgg cgacaccttc	gatccccagt ctccactgcg tcggattcta tcttcaggga tcttctctct ttctagaaaa aaaaactggac acattttgga catagttgtc ccgtagagtc tcaccatcac aatgtggtcg tctgtctggc ccttggtat agctgtcctg tgatgctctg ctgtcatgga tggtcttaat ctgggtcatc acagcaggaa atgaagtgtg gcatcaccta ttagctcctg tcatgggggc tgagagggga taccgtgggc ctgggctatg cgacccgggt accaaagct	atcacgcaga cccatcctgc gggaagcga gactggagtt tattcatcca gtcagtcatt acattttgga cagagaagaa acccaatggc cgtggtcctt cgtgggcttg cactgacctg caagtggagc cacagcctcc ccactgcgg tggtcttaat cgagaccagc cgggctgggtg ctaccgcata gaaggcagcc cttcatcact tgatgccatc cctgaacccc cttctgtgc	Homo sapiens



Hormone/Chor  
iogonadotrop  
in Receptor

sapiens

agccgcgcgt gccacgagcg ctgcgcgagg cgctctgccc tgagccctgc aactgcgtgc  
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ataacagatc agaaatttaa ataagggggc tttttcctca ggtagtttga aaaaacacat

150	2964	Luteinizing Hormone/Chorionotropin Receptor	NP_000224.1	<p>ctagagatgc actgttcaat tcggtacgca ctaggcacat gtggctaaat taaaataaa  taaaatgaga aatgtagttt ctacgttgca ctacgtttca agttctcaat ggctacgtca  agttctcaat ggctacgtgt gactagtgct taccatactg gacagcacag acacagaata  ttttcatcac cacagaaaagt tctatctgtt ctattataga gacttttatg tatgccttat  ctggattcta cttatttata atttaaggta aacatctgaa agcacatttc agcctatttg  cttagtgaaa cattaagctg tagactgtaa actcctcgtg agtaggaacc ctgtctcagt  gcattttgtt ttctctgttc ctactcaag atcttggcaa tgggtacacta caaatgtgct  gagttagaat tactctgaag ttatgaaca tataaatgaaa acaatttttc cggcc  MKQRFSAQL LKLLLLLQPP LPRALREALC PEPNCVDPG ALRCPGPTAG LTRLSLAYLP P  VKVIPSQAFR GLNEVIKIEI SQIDSIERIE ANAFDNLNL SEILIQNTKN LRYIERGAFI sapiens  NLPLKYLISI CNTGIRKFPD VTKVPSSEN FILEICDNLH ITTIPGNAFQ GNNESVTLK  LYNGGFEEVQ SHAFNGTTLT SLELKENVHL EKMNGAFRG ATPKTLDIS STKLQALPSY  GLESIQRLIA TSSYSLLKLP SRETFVNLE ATLTPSHCC AFRNLPTKEQ NFHSISENF  SKQCESTVRK VSNKTLYSSM LAESELGWD YEYGFCLPKT PRCAPEPDAF NPCEDIMGYD  FLRVLIWLIN ILAIMGNMTV LFVLLTSRYK LTVPRFLMCN LSFADFCMGL YLLLIASVDS  QTKGQYVYHA IDWQTGSGCS TAGFTVFAS ELSVYTLTVI TLERWHTITY AIHLDQKIRL  RHAAILMLGG WLFSSLIAML PLVGVSNYMK VSICFPMDVE TTLSQVYILT ILILNVVAFF  IICACYIKIY FAVRNPELMA TNKDKTKIAKK MAILIFTDT CMAPISFFAI SAAFKVPLIT  VTNSKVLVL FYPINSCANP FLYAIFTKTF QRDFLLLSK EGCKRRRAEL YRRKDFSAYT  SNCKNGFTGS NKPSQSTLKL STLHCQGTAL LDKTRYTEC</p>	Homo sapiens
151	2976	Lysophosphatidic Acid Receptor Edg2	NM_001401	<p>acggcgcgct gggtcacac tgctccgcgc cggacgggct ttgtggttg ggcgcgcgct A  gcgagtgcga gtgagagtgt gggtgcgcgc tggtggcgcg ggcgcgcgct gggtggcgctg  cgttcttgcg agcgggcctg caggagcgca ggctccctcg gctcccgca ccagcgcgcg  gacggagccc ctggagggaa gttgcgcgag cgcccgccct cctgtcccg  gccaggtagt cagcttctcc tagcatgact tcgactgtat cagcaaaaca gaaaatttgt  ctcccgtagt tctggggcggt gttcacacc tacaaccaca gagctgtcat ggctggccatc  tctacttcca tccctgtaat ttcacagccc cagttcacag ccatgaatga accacagtgc  ttctacaaag agtccattgc cttcttttat aaccgaagt gaaagcatct tgccacagaa  tggaacacag tcagcaagct ggtgatggga cttggaaatca ctgtttgtat cttcatcatg  ttggccaacc tattggtcat ggtggcaatc tatgtcaacc gccgcttcca ttttctatt  tattacctaa tggctaactt ggctgctgca gacttcttg ctgggttggc ctacttctat  ctcatgttca acacaggacc caatactcgg agactgactg ttagcacatg gctccgtcgt  cagggcctca ttgacaccag cctgacggca tctgtggcca acttactggc tattgcaatc  gagaggcaca ttacggtttt ccgatgcag ctccacacac gcatgagcaa ccggcggtga  gtgggtgtca ttgtggtcat ctggactatg gccatcgta tgggtgctat acccagtgtg  ggctggaaact gtatctgtga tattgaaaat tgttccaaca tggcacccct ctacagtgc  tcttacttag tcttctgggc catttcaac ttggtgacct ttgtggtaat gggtgttctc  tatgtcaca tcttgggcta tgttcgccag aggactatga gaatgtctcg gcatagtctt  ggaccccgcc ggaatcgga taccatgatg agtcttctga agactgtggt cattgtgctt  ggggccttta tcatctgctg gactctgga ttggttttgt tacttctaga cgtgtgctgt  ccacagtgcg acgtgctggc ctatgagaaa ttcttcttc tcttgcgtga attcaactct</p>	Homo sapiens

152	2976	Lysophosphat idic Acid Receptor Edg2	NP_001392.1	<p>gccatgaacc ccattcattta ctctacccg gacaaagaaa tgaaggccac ctttaggcag atcctctgct gccaggcgag tgagaacccc accggcccca cagaaggctc agaccgctcg gcttctctccc tcaaccacac catcttggtt ggagttcaca gcaatgacca ctctgtggtt tagaacggaa actgagatga ggaaccagcc gtccctctctt ggagataaaa cagccctccc ctaccacaatt gccaggggcaa ggtggggtgt gagagaggag aagagtcaac tcatgtactt aaacactaac caatgacagt atttgttctt ggacccca agactgata tatattgaaa attagcttat gtgacaaccc tcatcttgat ccccatccct tctgaaagta ggaagttgga gctcttgcaa tggaaattcaa gaacagactc tggagtgctc atttagacta cactaactag acttttaaaa gatcttggtt ggttggtgc aagtcagaat aaattctggc tagttgaatc cacaacttca ttatataca ggttccctt ttttattttt aaaggatacg ttacacttaa taaacacggt tatgctatc agcatgttg tcatggatga gactatggac tgcttttaaa ctaccataat tccatttttt cctttacata ggaactgt aagttggaat tatctttgt ttgaaaagca tgcattgtaat gtatgtatgc agtatgcctt acttaaaaag attaaaagga tactaatgtt aaatcttcta ggaatataga cctagacttc aagccagta ttgttttagg tcatgaagca acaatgctc taatcacat attaatgtt taattaaaaa gttgtaacaa gtataaaaaa ggaatgttaa gtttattacc aagtgatat gtattccaaa aagtcatag aagatgaagc actataatat tgttccata tatttaaaat acccaagtac attctaatta ccagtatatc agaggaaaat ttctgtagt ttgttaaaat aatatactca tcatagaaaa cttgaaaaat gagaaaatgt ataaaaagc aaaaatgatt actgataata tcacaaccca gaagtaacca cctttaaaaa gcaaccccca tgtatgccta tatgtgtatt gtatactttt tttacataat tggagtcata ctgtaaacag ttttataagt agatcttttt cattgcaaaa ttgccacatt ttcttatggc attaaaaatt ttacaaaaac ataatttttaa tggctatat atattccatt taatggatgc aactcagttt atttaacat tcccatgttg ttaactattt aggtgttttc taattttcat tattataaag tgcagaaat ttggtgt</p> <p>MAAISTSIPIV ISQPQFTAMN EPQCFYNESI AFFYNRSKGH LATEWNTVSK LVMGLGITVC P IFIMLANLLV MVAIYVNRFF HFPIYILMAN LAAADFFAGL AYFYLMFTVG PNTRRLTVST WLLRQGLIDT SLTASVANLL AIAIERHITV FRMLHTRMS NRRVVVVIW IWTMAIVMGA IPSVGNWCIC DIENCSNMAP LYSDSYLVFW AIFNLVTFV MVLYAHIFG YVRQRTMRMS RHSSGPRRNR DTNMSLLKTV VIVLGAFLIC WTPGLVLLLL DVCCPQCDVL AYKFFLLLA EFNSAMNP II YSYRDKEMSA TFRQILCCQR SENPTGPTES SDRSASSLNH TILAGVHSND HSV</p>	Homo sapiens
153	3038	G Protein- Coupled Receptor MRG	S78653	<p>ttttgtattt gttgcaccct aagctctgttc atttcttct cctcagctga catttgagc A atagcagtcg atgatgcccc cacagacact gcctgagact cagccccctg gagaacgca gatttcccta ttttccaggt caagtctgc cagccataga aaggacttct ttggtgcaaa ctgctgtgaa atgcctgcct tggaaatctc agtgcctcct tgtacctgtc tgaagccagg gaaatgccat actgtggcac tgcctgatcc ttgtatggcta ccaagagatg cccagagactg gtttgaaaaga gatgagacat gcccaggtgc ttggctcacg ctgttaatcc agcactttgg gaggtcaagg cagtggatca caaggtcaga tttagagacca gccaggccaa tatggtgaaa accccatctc tactaaaaat acaaaaaatt agccgggcaa tgggtggtggg tgcctgtagt tccagctagt caggaggccg aggcaggaga atcgcttgaa cctggaaggt ggaggttcca gtgagctgag atcgcgccac tgcactccag cctgggtgac agagtgagac tccaactcaa</p>	Homo sapiens

154	3038	G Protein- Coupled Receptor MRG	AAB21255.1	<p> aaaaaaaaa aaaaagaga tgaacacta gtgtctcatg agtagaacct ggaccagaca  caaatctcca ttcccaatgt ttagtgctc attagtcccc aacaacaaga tattgggtct  atgtgggtag gcctggggca tcctgtacaa caggagatgt gtaggggag ggagaacaga  tcacaaatc atggagagct attgacagag cagatactcc catccactct gatagttagt  taatgttcag ctgttccctaa aaagcacacc caacaatggg tgttctattc cagcctagga  aaatgtagag gcaaggggtc tgaggccaga ggacaccact agatggacca ctgtctctga  ctgtgatgtt gtggccact caggtccag caccatgg tctgggggaa aattgtctgg  ttcagccaga gggctggatg gacagtgtt gctgagtcac agatatctct ctcatgtagc  ctttgtctcc acagtgtga ccaggaggca cagaacccaa acctggtatc tcagctctgt  ggcgtcttc ttcaaaatga gacgaatgaa accatacata tgcagatgag catggcagtg  ggacagcagg cctgcccctt gaatactatt gcccacaagg ctgtgctggt ctccctctgt  gggtcttat tgaatggcac tgtcttctgg ctgctttgct gtggggccac gaatccctac  atgtatata tcctccacct ggtcgtgct gacgtgatct atctttgctg ctcggcagtg  gggtctttac agtgactct gctaaacttat catggagtcg tgttttttat cctgatttc  ctggccatat tgtctccctt ctcttttgag gtgtgtctct gtctcctggt ggccatcagc  acagagcgggt gtgtgtgtgt cctcttcccc atctgtaca gatgccaccg cccaaaatac  acatctaattg ttgtctgcac cctcatctgg ggcctgcctt ttgcatcaa catagtaaaa  tcacttttcc taacttactg gaaacatgta aaggcatgtg tcataattct aaagctttct  gggtcttcc atgtatctct ttcactgtg atgtgtgtgt cgagtctgac tctactcatt  agattctgt gctgctcca gcagcaaaa gcccacaggg tctatgcggt ggtgcagatc  tcggcccca tgttctctact ctgggcccta cccctgagc tggcaccct cataacagat  ttcaaaatgt ttgtcaccac ctctattta atttcttgt tctcattat aaacagcagc  gccaacccta tcatttattt ctttgtggg agcctcagaa agaaaaggct gaaggaaatct  ctcagagtga ttctccaaag ggcgttagca gataagccag aggtggggag gaacaaaaag  gcagctggca tcgacccaat ggagcaacca cactctactc agcatgtgga gaaccttctt  cccaggagc acagggtcga tbtggaaaca taatttccca catctgagct ggggaattgt  acacatagta accagcctg tctgcatca taaggctgtt gcataaaatc aatgctttat  tctaataag ttcagcttc atggactttc aaaaacacc ctltgctgtt gtggttgaa  gagacattaa ctctcttct aggcagtaag ccagatttga atgtgtcca gtccaacga  tgaggggaat gggaccagt gagactttcc tggtaacctgt ggaatccaa taaagacct  acaaaggcat gaattc </p>	Homo sapiens
155	3057	Melanocortin 3 Receptor (MC3R)	NM_019888	<p> atgagcatcc aaaagaagta tctggaggga gattttgtct tctctgtgag cagcagcagc A  ttcctacgga ccctgctgga gccccagctc ggatcagccc ttctgacagc aatgaatgct  tcgtgctgcc tgcctctgt tcagccaaca ctgcctaagt gctcggagca cctccaagcc </p>	Homo sapiens

156	3057	Melanocortin NP_063941.1 3 Receptor (MC3R)	MSIQKYLEG DFVFPVSSS FLRTLLPQL GSALLTAMNA SCCLPSVQPT LPNGSEHLQA P PFFSNQSSA FCEQVFIKPE IFLSLGIVSL LENILVILAV VRNGNLHSPM YFFLCSLAVA DMLVSVSNAL ETIMIAIVHS DYLTFEDQFI QHMDNIFDSM ICISLVASIC NLLAIAVDRL VTIFYALRYH SIMTVRKALT LIVAIWVCCG VCGWVFIYS ESKMVIVCLI TMFFAMMLLM GTLVHMFLEF ARLHVKRIAA LPPADGVAPQ QHSCMKGAVT ITILGVFIF CWAPFFHLHV LIITPTNPY CICYTAHENT YLVLMCNVS IDPLIYAFRS LELRNTFREI LCGNGMNLG atgggtgaact ccaccacccg tgggatgcac actctctgc accctctggaa ccgcagcagt A tacagactgc acagcaatgc cagtgagtcc cttggaaaag gctactctga tggagggtgc tacgagcaac ttttgtctc tctgtaggtg tttgtgactc tgggtgtcat cagcttgttg gagaatatct tagtgattgt ggcaatagcc aagaacaaga atctgcattc acccatgtac tttttcatct gcagcttggc tgtggctgat atgctggtga gcgtttcaaa tggatcagaa accattatca tcacctatt aacagtaca gatacggatg cacagagttt cacagtgaat attgataatg tcattgactc ggtgatctgt agtccttgc ttgcattccat ttgcagcctg ctttcaattg cagtggacag gtactttact atcttctatg ctctccagta ccataacatt atgacagtta agcgggttgg gatcatcata agttgtatct gggcagcttg cagggtttca ggcattttgt tcatcattta ctcatagatg agtgcgtgca tcatctgcct catcaccatg ttcttcacca tgcgtgctct catggcttct ctctatgtcc acatgttctt gatggccagg cttcacatta agaggattgc tgtcctccc ggcaactggg ccacgcgcca aggtgccaat atgaaggagg cgattacctt gaccatcctg attggcgtct ttgtgtctg ctgggcccc ttcttccctc acttaattt ctacatctct tgcctcaga atccatattg tgtgtgcttc atgtctcact ttaacttgta tctcactatg atcatgtgta attcaatcat cgatcctctg atttatgcac tccgagtgca agaactgagg aaaccttca aagagatcat ctgttgctat ccctgggag gcctttgtga cttgtctagc agatattaa 157	3058	Melanocortin NM_005912 4 Receptor (MC4R)	ENILVIVAIA KNKNLHSPMY FFICSLAVAD MLVSVSNGSE TIIITLLNST DTDAQSFTVN YEQLFVSPEV FVTIGVISLL P 158	3058	Melanocortin NP_005903.1 4 Receptor	YEQLFVSPEV FVTIGVISLL P DTDAQSFTVN	Homo sapiens
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159	3059	(MC4R)	Melanocortin 5 Receptor (MC5R)	NM_005913	IDNVIDVIC SLLASICSLSLSIAVDRYFTIFYALQYHNI MTVKRVGIII SCIWAACVTS GILFIYSDS SAVIICLITM FFTMLALMAS LYVHFMFLMAR LHIKRIAVLP GTGAIRQGAN MKGAITLTIL IGVEVVCWAP FFLHLIFYIS CPQNPYCVCF MSHENLYLIL IMCNSIIDPL IYALRSQELR KTFNELICCY PLGGLCDLSS RY	Homo sapiens
					atgaattcct cattcacct gcatttcttg gatctcaacc tgaatgccac agagggcaac A ctttcaggac ccaatgtcaa aaacaagtct tcaccatgtg aagacatggg cattgctgtg gaggtgttc tcaactggg tgatcatcagc ctcttgaga acatcttggt cataggggce atagtgaaga acaaaaacct gcactcccc atgtacttct tegtgtgcag cctggcagtg gcggacatgc tggtagagcat gtccagtgc tgggagacca tcaccatcta cctactcaac aacaagcacc tagtgatagc agacgccttt gtgcgccaca ttgacaatgt gttgactcc atgatctgca tttcogtgggt ggcattccatg tgcagcttac tggccattgc agtggatagg tacgtcacca ttttctacgc cctgcggtac caccacatca tgacggcgag gcgtcaggg gccatcatcg ccggcatctg ggctttctgc acgggctgcg gcattgtctt cactcgttac tcagaaacca cctacgtcat cctgtgcctc atctccatgt tcttcgctat gctgttctc ctgggtgtct tgtacataca catgttctc ctggcgcgga ctacgtcaa gcggatcgcg gctctgcccg gggccagctc tgcgcgcgag agaccagca tgcagggcg gcacacgtc accatgctgc tggcggtgtt taccgtgtgc tgggccccgt tcttcttca tctcacttta atgctttctt gccctcagaa cctctactgc tctcgcttca tgtctcactt caatatgtac ctcatactca tcatgtgtaa ttcogtgatg gaccctctca tatatgcctt ccgcagccaa gagatgcgga agacctttaa ggagattatt tgctgccgtg gtttcaggat cgctgcagc tttcccgaa gggattaa	
160	3059	(MC5R)	Melanocortin 5 Receptor (MC5R)	NP_005904.1	MNSFHLHFL DLNLNATEGN LSGPNVNKKS SPCEDMGIIV EVFLTLGVIS LLENILVIGA P IVKNKNLHSP MYFFVCSLAV ADMLVSMSSA WETITIYLLN NKHLVIADAF VRHIDNVFDS MICISWASM CSLLAIAVDR YVTIFYALRY HHIMTARRSG AIIAGIWAFC TCGGIVFILY SESTYVILCL ISMFEAMLEL LVSLYIHMFL LARTHVKRIA ALPGASSARQ RTSMQGAUTV TMLLGVTVC WAPFFLHLLT MLSCPQLYC SRFMSHFENMY LILIMCNSVM DPLIYAFRSQ EMRKTFKEII CCRGFRIACS FPRRD	Homo sapiens
					ggagaggggtg tgaaggcaga tctggggggtg ccagatgga aggaggcagg catgggggac A accgaaggcc ccttggcagc accatgaact aagcaggaca cctggagggg aagaactgtg gggacctgga ggcctccaac gactccttc ggtctcctg acaggactat ggctgtgcag ggatcccaga gaagacttct gggctccctc aactccacc ccacagccat cccccagctg gggtggctg ccaaccagac aggagcccg tgcctggagg tgcctatctc tgacgggctc tctctcagcc tgggggtggt gagcttggtg gagaacgcgc tgggtggtggc caccatcgcc aagaaccgga acctgcactc acccatgtac tgcctcatct gctgctggc cttgtcggac ctgctggtga gcgggagcaa cgtgctggag acggcgtca tctcctgct ggaggccggt gcactgggtg ccggggctgc ggtgctgcag cagctggaca atgtcattga cgtgatcacc tgacgtcca tctgttccag cctctgctc ctggcgcca tgcctgtgga ccgtacatc tccatcttct acgcactgc ctaccacagc atcgtgacc tgcggcgggc gcggcaagcc gttgcggcca tctgggtggc cagtgcgtc ttcagacgc tcttcatcgc ctactacgac cacgtggccg tctgtgtg cctcgtggtc tcttctcctg ctatgctggt gctcatggcc gtgctgtacg tccacatgct gggccgggccc tgccagcacg cccagggcat cgcccgctc	
161	3061	(MC1R)	Melanocortin 1 Receptor (MC1R)	NM_002386	ggagaggggtg tgaaggcaga tctggggggtg ccagatgga aggaggcagg catgggggac A accgaaggcc ccttggcagc accatgaact aagcaggaca cctggagggg aagaactgtg gggacctgga ggcctccaac gactccttc ggtctcctg acaggactat ggctgtgcag ggatcccaga gaagacttct gggctccctc aactccacc ccacagccat cccccagctg gggtggctg ccaaccagac aggagcccg tgcctggagg tgcctatctc tgacgggctc tctctcagcc tgggggtggt gagcttggtg gagaacgcgc tgggtggtggc caccatcgcc aagaaccgga acctgcactc acccatgtac tgcctcatct gctgctggc cttgtcggac ctgctggtga gcgggagcaa cgtgctggag acggcgtca tctcctgct ggaggccggt gcactgggtg ccggggctgc ggtgctgcag cagctggaca atgtcattga cgtgatcacc tgacgtcca tctgttccag cctctgctc ctggcgcca tgcctgtgga ccgtacatc tccatcttct acgcactgc ctaccacagc atcgtgacc tgcggcgggc gcggcaagcc gttgcggcca tctgggtggc cagtgcgtc ttcagacgc tcttcatcgc ctactacgac cacgtggccg tctgtgtg cctcgtggtc tcttctcctg ctatgctggt gctcatggcc gtgctgtacg tccacatgct gggccgggccc tgccagcacg cccagggcat cgcccgctc	Homo sapiens



164	3079	Melatonin Receptor type 1a	NP_005949.1	<p> cacaaccaca accaacacaca caaacctttc agctggcaga gttagcattg ggtagctata  ctcatggtca taaatgtttg ccgctctata ttacaagtgg tgcatgcaac cagataaaga  actaaatcat aggcgggga cagtcgctca cactgtaac ctacgcaact tgggaggctg  aggtgggcag atcaactgag ttacaggagt tgagaccacc ctggggcaac atgatgaaat  cccatctcta aaaaaataca aaaaattatc tgggcatggt gcacacgctt gtaatccacg  ctactcagga gactgagtta ggagaatccc ttgagcccca gaggcagagg ttgtggtgag  ccgagatcgc gccagtacat tccaacttag gctacagaat gagactctgc ccaaaaaaaa  aaaaaaa </p>	Homo sapiens
165	3080	Melatonin Receptor type 1b	NM_005959	<p> MQNGSALPN ASQVLRGDG ARPSWLASAL ACVLIFTIVV DILGNLVL SVYRNKKLRN P  AGNIFVSLA VADLVVAIYP YPLVLMISFN NGWNLGYLHC QVSGFLMGLS VIGSIFNITG  IAINRYCYIC HSLKYDKLYS SKNSLCYVLL IWLTLAVAL PNLRACTLOQ DPRIYSCFFA  QSVSSAYTIA VVVFHFLVPM IIVIFCYLRI WILVLQVRQR VKPDRKPKLK PQDFRNFVTM  FVVFVLFPAIC WAPLNFIGLA VASDPASMVP RIPEWLFVAS YIMAYFNSCL NAIYGLLNQ  NERKEYRRII VSLCTARVEF VDSSNDVADR VKWKPSPLMT NNNVVKVDSV </p>	Homo sapiens

166	3080	Melatonin Receptor type 1b	NP_005950.1	<p>ttggttaacta caaggcctc aggtgggca ggtgcagag 9c</p> <p>VILSVLRNRK LRNAGNLFV SLALADLVVA FYPYPLILVA IFYDGNALGE EHCKASAFVM</p> <p>GLSVIGSVFN ITAIAINRYC YICHSMAYHR IYRRWHTPLH ICLILLTVV ALLPNFFVGS</p> <p>LEYDPRIYSC TFIQTASTQY TAAVVIHFL LPIAVWFCY LRIWVILQA RRAKAPESRL</p> <p>CLKPSDLRSF LTMFVVFVIF AICWAPLNCI GLAVAINPQE MAPQIPEGLF VTSYLLAYFN</p> <p>SCINAIVYGL LNONFREYK RILLALWNPR HCIQDASKGS HAEGLOSPAP PIIGVQHQAAD</p>	Homo sapiens
167	3081	Melatonin- Related Receptor	NM_004224	<p>AL</p> <p>tggttgctgt ctggacctgg ctgctgatcc tgagcctgct gggagatctt aacgatcccc A</p> <p>aggagcaaca tggggccac cctagcgggt cccacccct atgctgttat tggctgtaag</p> <p>ctacccagc cagaataccc accggctcta atcatcttta tgtctgctg gatggttatc</p> <p>accatcgttg tagactaat cggcaactcc atggtcattt tggctgtgac gaagaacaag</p> <p>aagctccgga atcttgcaa catcttcgtg gtcagtcctt ctgtggcga tatgctggtg</p> <p>gccatctacc catacccttt gatgctgcat gccatgtcca ttgggggctg ggatctgagc</p> <p>cagttacagt gccagatggt cgggttcac acagggtga gtgtggtcgg ctccatcttc</p> <p>aacatcgtgg caatcgctat caaccgttac tgcatactt gccacagcct ccagtacgaa</p> <p>cggatcttca gtgtggcaa tacctgcat tacctggta tccctggat catgaccgtc</p> <p>ctggctgtcc tggccaacat gtacattggc accatcagat acgatcctcg caccataacc</p> <p>tgcattctca actatctgaa caacctgtc ttcactgtta ccatcgtctg catccacttc</p> <p>gtcctccctc tctcatcgt gggtttctgc tacgtgagga tctggaccaa agtgcctggg</p> <p>gcccgtgacc ctgcagggca gaatcctgac aaccaacttg ctgaggttcg caattttcta</p> <p>accatgtttg tgatcttct cctctttgca gtgtgctggt gccctatcaa cgtgctcact</p> <p>gtcttggtgg ctgtcagtc gaaggagatg gcaggcaaga tcccaactg gctttatctt</p> <p>gcagcctact tcatagccta cttcaacagc tgcctcaacg ctgtgatcta cgggctcctc</p> <p>aatgagaatt tccgaagaga atactggacc atcttccatg ctatcgggca ccctatcata</p> <p>ttctccctg gccatcatcag tgatactcgt gagatgcagg aggcccgatc cctggcccg</p> <p>gcccgtgccc atgtctcga ccaagctcgt gaacaagacc gtgccatgc ctgtcctgct</p> <p>gtggaggaaa cccgatgaa tgtccggaat gttccattac ctggtgatgc tgcagctggc</p> <p>caccccgacc gtgctctgg ccacctaaag cccattcca gatcctctc tgcctatcgc</p> <p>aaatctgct ctaccacca caagtctgtc tttagccact ccaaggctgc ctctgggtcac</p> <p>ctcaagcctg tctctggcca ctccaagcct gcctctggtc acccaagtc tgccactgtc</p> <p>taccctaagc ctgctctgtt ccatttcaag ggtgactctg tccatttcaa ggtgactct</p> <p>gtccatttca agcctgactc tgttcattc aagcctgctt ccagcaacc caagcccatc</p> <p>actggccacc atgtctctgc tggcagccac tccaagtctg ccttcagtgc tgcaccagc</p> <p>caccctaaac ccataagcc agtaccagc catgctgagc ccaccactgc tgactatccc</p> <p>aagcctgcca ctaccagcca cctaagccc gctgctgctg acaaccctga gctctctg</p> <p>tccattgccc ccgagatccc tgcattgccc caccctgtgt ctgacgacag tgacctcct</p> <p>gagtcggcct ctagccctgc cgtggggccc accaagcctg ctgccagcca gctggagtct</p> <p>gacaccatcg ctgaccttcc tgacctact gtatgacta ccagtaccaa tgattaccat</p> <p>gatgtcgtgg ttgttgatgt tgaagatgat cctgatgaa tggctgtgtg aaaaatgctc</p> <p>tcgtaggtgg ccaggcagt</p>	Homo sapiens

168	3081	Melatonin- Related Receptor	NP_004215.1	MGPTLAVPTP NSGNIFWVSL AIAINRYCYI NYLNNPVFTV VIFLLFAVCW FRREYWTIFH TPMNVNVPPL VSGHSKPASG HVSAGSHSKS PEIPAIAHPV VVDVEDDPDE MAV	YGCIGCKLPQ SVADMLVAIY CHSLQYERIF TIVCIHFVLP CPINVLTVLV AMRHPPIFFP PGDAAAGHPD HPKSATVYPK AFSAATSHPK SDDSLLPESA SSPAAGPTKP AASQLESDDTI ADLPDPTVVT TSTNDYHDVV	MFCAMVITIV IGWDLSQLQ ITWIMTVLAV IWKVLAARD IPNWLYLAA GLISDIREMQ RASGHPKPHS PASVHFKGDS PIKPATSHAE SSPAAGPTKP AASQLESDDTI ADLPDPTVVT TSTNDYHDVV	VDLIGNSMVI COMVGFITGL LPNMYIGTIE PAGQPNQOL FIAYENSCLN HARDQAREQD RSSHKSVEFH KPDVHFKEPA TTSHPKPAAP ADLPDPTVVT TSTNDYHDVV	LAVTKNKKLR SVVGSIFNIV YDPRTYTCIF AEVRNFLTME AVIYGLLNEN RAHACPAVEE SKAASGHLKP SSNPKPITGH DNPELSASHC TSTNDYHDVV	Homo sapiens
169	3093	Metabotropic Glutamate Receptor 1	NM_000838	gaattccctt acgaaggga ggggcaccac agcgggacca cgggctcctt ccccggcagg cggagatgtc gccccagagg gttccacacg cagtgagatc cattagggac tgacggccag cggctccagc gategcttat gaggtgtgtc caattggacc cgctttcaaa cagcaacgct caaggctaga catgcccgcg cagagatgaa gcagttccca cacgaggaat acaccttctg aaactatgtc tgggctgcag gaagcccatc atctggagag gaatctgcag aggagtgtctg	acaaacgcct aggaggcgtt tccgggagag gcgtgggaac ttgttttttt aaagtgttgc atcattggag aagtgtgggg ttggataaga cgggactcct tctctgattt tccttcccc tctgtagcca tcagccacaa ccttctgaca tatgtctctg gagctggctg ggggagaaga gtgggtgtct cttggcgtcg gtcattgaa gaggtcaggt catttgatga ctgagttctg gaaatccca caggacagta acatgcacc atgccctctg agctgctgga gacggcagca gtgatgggt tctgatgaa ctaactcgta ataacatgat	ccagcttcta ggtggaggag gcggcgctgg gcgtgtggca tcccagcat tggcaggagc ccctcttctc agatcaggga tcaacgcgga gttgacactc ccattcgaga caggcaggac ttcaagtga gcctgcacct cttgcaggc cagtcacac cccaggaaag gctttgaccg gcttctgtga tgggcgagtt gttatgaggt catttgatga ctgagttctg actttaaacg aatctgcaca agatggggtt tgtcatcaat gccatctatg gtgggcctct ccttcctcat aagtcctcat cctggaaggt tgactatgtg cacgttgga ccagatggag	tgaggagccc tgacgacca ggtgctggcg ctcgtcctca gtgtcccttc cgctcgggtg cagcctccgg atccagaggg ctgcccaaca ctggaacaga gggatcaacc attgcgggag cagctctctg acatccccc actttgtaca cttgacatag tatggggaga gcccattctg aaactccgag gtgcgaggac ggaagtgatg gggggaatca aaactgaggc tattttcttg tccagtgcc ggcaatgaaa ggttagaaga gccatctatg gtgggcctct aagtcctcat cctggaaggt caggttgga aagagtggag	agaggaggag ttgttggcga gggagcctgc ccaccatggt tccccagaag ccagaatgga ccgagaaagt tgagggccat tcacctggg tcaggaaaca gcattgagtt gggtctgccc tgatcgggtcc acatccccc aatacttctc tcaaacgtta gcggaatgga acaaaatcta agagcttccc tcctgagcgc gatgggcaga cgataaagct tggaactaaa gccttccagg gcttagaaga ccatggcaca gcgatgccat tcattggagt atgatatacat cctgggcatga tggtgcggtc	Homo sapiens

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 taaatattt ctattatt

sapiens

## Glutamate Receptor 1

[illegible]

171

Metabotropic NM\_000839  
Glutamate  
Receptor 2

**Homo sapiens**



172	3094	Metabotropic NP_000830.1 Glutamate Receptor 2	aggtccgctt tgaccgctt ggtgatgta ttggcgcta caacatctt accatctgc gtgcaggcag tggcgctat cgctaccaga agtggtgcta ctgggcagaa ggttgactc tggacaccag cctcatccca tggcctcac cgtcagcgg cccctggcc gctctcgct gcagtgcgc ctgcctccag aatgagtgga agagtgtga gccgggcgaa gctgctgct ggctctgcat tccgtgccag ccctatgagt accgattgga cgaattcact tgcgtgatt gtggcctggg ctactggcc aatgccagc tgaactggctg cttcgaactg cccaggagt acatccgctg gggcgatgc tgggctgtg gacctgtcac catgcctgc ctgggtgccc tggccacct gttgtgtcg ggtgtcttg ttgggcacaa tggcacacca gtggtcaagg cctcagtgcg ggagctctgc tacatctgc ttgggtgtgt cttcctctgc tactgcatga ccttcattt cattgccaa ccatccacgg cagtgtgtac cttacggcgt cttggtttgg gcaatgctt ctctgtctg tactcagccc tgcacacaa gaccaaccg attgcacgca tcttcgttg ggcgggag ggtgccagc ggcacgct catcagctt gctcaccagg tggccatctg cctggcactt atctgggccc agtgcctcat cgtgtgcgc ttggtgttg tggaggcacc gggcacaggc agggagacag ccccgaaag cggggaggtg gtgacactgc gctgcaacca ccgcatgca agtatgttg gctcgtggc ctacaaatgt cctcctcgc cgctctcac gctttatgc tcaatactc gcaagtggc cgaacactt aacgaggcca agttcattg cttcaccatg tacaccact gcatcattg gctggcattg ttgccatct tctatgtcac ctccagtgc taccgggtac agaccacac catgtgcgtg tcagtcagcc tcagcgctc cgtgtgctt gctgcctct ttgcgcccac gctgcacatc atcctcttc agccgcagaa gaacgtggt agccacggg caccacacag ccgctttggc agtgcgtg ccagggccag ctccagcct ggccaaagg ctggctccc gttgtcccc actgtttgca atggcctga ggtgtggac tgcacaact catcgcttg a	Homosapiens
173	3095	Metabotropic NP_000840 Glutamate Receptor 3	ctttgtgtc ggtatgagg gaccaacct gagccagagc ccgggtgtag gctcaccgccc gcccgtgcca ccgcggtcag ctccagttcc tggcaggagt tgcggtgtag aggaatttg tgacaggctc tgttagtctg ttcctccctt attgaagga caggccaaag atccagttg gaaatgagag aggactagca tgacacattg gctccaccat tgatatctcc cagaggtaga	Homosapiens

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174	3095	Metabotropic NP_000831.1 Glutamate Receptor 3	tggttggttg caccacaggt tcacatcatc ctggtttcaac ccagagaaga tggtgtcaca cacagactgc acctcaacag gttcagtgct agtggaaactg ggaccacata ctctcagtc tctgcaagca cgtatgtgcc aacgtgtgc aatgggaggg aagtccctga ctcaccacc tcattctgtg gatttgaat tgagttcag tcttggtgtt ttttagactgt tagacaaaag tgctcacgtg cagctccaga atattgaaac agagcaaaaag acaaacctta gtacctttt ttagaaacag tacgataaat tatttttag gactgtatat agtgatgtgc tagaactttc taggtgagt ctagtcccc tattattaac aattccccca gaacatggaa ataaccattg tttacagagc tgagcattgg tgacagggct tgacatggct agtctactaa aaaaacaaa aaaaaacaa aaaaaaaaaa acaaaagaa aataaaaaa tacggtggca atattatga acctttttc ctatgaagtt tttgtaggt ccttggtga actaattag gatgagtttc tatgttgtat attaaagtta cattatgtg aacagattga tttctcagc acaaaataaa aagcatctgt attaatgtaa agatactgag aataaaacct tcaaggtttt MLTRLQVLT ALFSKGFLS LGDHNFLRRE IKIEGLVLG GLFPINEKGT GTEECGRINE P DRGIQRLEAM LFAIDEINKD DYLLPGVKLG VHILDTCSRDL TYALEQSLEF VRASLTKVDE AEYMPDGSY AIQENIPLLI AGVIGGSYSS VSIQVANLLR LFOIPQISYA STSAKLSDKS RYDYFARTVP PDFYQAKAMA EILRFENWTY VSTVASEGDY GETGIEAFEQ EARLRNICIA TAEKVGRSNI RKSYSVSIRE LIQPNARVV VLFMSDDSR ELIAAASRAN ASFTWVASDG WGAQESIIGK SEHVAYGALT IELASQPVRO FDRYFQSLNP YNNHRNPWF DFWEQKFQCS LQKNRHHRV CDKHLAIDSS NYEQESKIMF VNAVYAMAH ALHKMQRTLC PNTTKLCDAM KILDGKKLYK DYLLKINETA PENPNKDADS IVKFDTFDGG MGRYNNVFQ NVGGKYSYLK VGHWAETLSL DVNSIHWSRN SVPTSQCSDP CAPNEMKNMQ PGDVCCWICI PCEPYEYLAD EFTCMDCGSG QWPTADLTGC YDLPEDYIRW EDAWAIGPVT IACLGFMCTC MVTVFIKHN NTPLVKASGR ELCYILLFGV GLSYCMTFFF IAKPSPVICA LRRGLGSGSE AICYSALLTK TNCIARIFDG VKNGAQRPKF ISPSQVFIC LGLILVQIVM VSWLILEAP GTRRYTLAEK RETVLKCNV KDSSMLISLT YDVILVILCT VYAFTRKCP ENFNEAKFIG FTMYTTCIIW LAFLPIFYVT SSDYRVQTTT MCISVSLSGF VVLGCLFAPK VHILFQPOK NVVTHRLHLN RFSVSGTGTT YSQSSASTYV PTVCNGREVL DSTTSSL	Homo sapiens
175	3096	Metabotropic NM_000841 Glutamate Receptor 4	ccgagtgaca aggaggtggg agagggtagc agcatgggct acgcggttgg ctgcccctcag A tccccctgct gctgaagctg ccctgcccct gccaccacag gccgtggggc caggggcctg ccagggctag gagtgggctt gccgttcctg ggtctctagg gatttccgag atgcctggga agagaggctt gggctgggtg tgggcccggc tggcccttgg cctgtctctc agcctttacg gccctggat gccttctcc ctgggaaagc ccaaaaggcca cctcacatg aattccatcc gcatagatgg ggacatcaca ctgggaggcc tgttcccggt gcattggcgg ggctcagagg gcaagccctg tggagaactt aagaaggaaa agggcatcca ccggctggag gccatgctgt tcgcccctga tcgcatcaac aacgacccgg acctgctgccc taacatcacg ctgggccc gcattctgga cacctgctcc agggacaccc atgcccctga gcagtgcctg acctttgtgc aggcgtctcat cgagaaggat ggacacagagg tccgctgtgg cagtggcggc ccaccatca tcaccaagcc tgaacgtgtg gtgggtgtca tgggtgttc agggagctcg gtctccatca tggtggccaa catccttcgc ctcttcaaga taccacagat cagctacgcc tccacagcgc cagacctgag tgacaaacag cgctacgact tcttctccc cgtgggtgcc tcggacacgt accaggccca ggcctatggtg gacatgctcc gtgcccctcaa gtggaactat gtgtccacag	Homo sapiens

tggcctcgga gggcagctat ggtgagagcg gtgtggaggc cttcatccag aagtcocgtg  
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176	3096	Metabotropic NP_000832.1 Glutamate Receptor 4	cacctttcc ctctctggcg tccccggctg cttgtactct tggccttttc tgtgtctcct ttctggctct tgctctcgcc tctctctctc atcctctttg tctcagctc ctctgctttt cttgggtccc accagtgtca cttttctgcc gttttctttc ctgttctcct ctgcttcatt ctcgtccagc cattgctccc ctctccctgc caccctccc cagttcacca aaccttacat gttgcaaaaag agaaaaaag aaaaaaatc aaaaacaaa aaagccaaaa cgaacaaaaa tctcagtggt gttgccaagt gctgctcct cctgtggcc tctgtgtgtg tccctgtggc ccgcagcctg ccgcctgccc ccgcccctct ccgctgtgtc ttgcccgcct gcccgccccg tctgcgctct gtcttgccc cctgcccgc gcccctcct gccgaccaca cggagttcag tgccctgggtg tttggtgatg gttattgacg acaatgtga gcgcatgatt gttttatc caagaacatt tctaataaaa ataaacacat ggttttgcaa aaaa	Homo sapiens
177	3097	Metabotropic NM_000842 Glutamate Receptor 5	MPGKRGIGWW WARLPCLLL SLYGPWMPSS LGKPKGHPHM NSIRIDGIT LGGLFPVHGR P GSEKPCGEL KKEKGIHRL EAMFALDRIN NDPDLLPNIT LGARILDTC RDTHALEQSL TFVQALIEKD GTEVRCGSGG PPIITKPERV VGVIGASGSS VSIMVANILR LFKIPQISYA STAPDLSDNS RYDFFSRVVP SDTYQAQAMV DIVRALKWNV VSTVASEGSY GESGVEAFIQ KSREDGGVCI AQSVKIPREP KAGEFDKIIR RLETSNARA VIIFANEDDI RRVLEAARRA NQTHGFEWNG SDSWGSKIAP VHLHEEVAEG AVTILPKRMS VRGFDRYFSS RTLDNRRNI WFAEFWEDNF HCKLSRHALK KGSHVKKCTN RERIGQDSAY EQEGKVQFVI DAVYAMGHAL HAMHRDLCPG RVGLCPRMDDP VDGTLKLYI RNVNFSGIAG NPVTFNENG APGRYDIYQY QLRNDSAEYK VIGSWTDHLH LRERMHWPG SQQLPRISIC SLPCQPGERK KTVKGMPPCCW HCEPCTGYQY QVDRYTCKTC PYDMRPTENR TGCRLPIIK LEWGSFWAVL PFLAVVVGIA ATLFVITFV RYNDTPIVKA SGRELSYVLL AGIFLCYAT FLMIAEPDLG TCSLRIFLG LGMSISYAAL LTKTNRIYRI FEQKRSVSA PRFISPSQL AITFSLISLQ LLGICVWFVW DPSSHVVDFQ DQRTLDPRFA RGVLKCDISD LSLICLLGYS MLLMVTCTVY AIKTRGVPEP FNEAKPIGFT MYTTCIVWLA FIPIFFGTSQ SADKLYIQTT TLTVSVLSA SVSLGMLYMP KVYIILFHEPE QNVPKRKRSL KAVVTAATMS NKFTQKGNFR PNGEAKSELC ENLEAPALAT KQTYVTYNH AI	Homo sapiens

aatgcagggg agcagagcct tgataagctg ctgaagaagc tcacaagtca cttgccccag  
gcccgggtgg tggcctgctt ctgtgagggc atgacgggtga gagtctgtct gatggccatg  
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178	3097	Metabotropic NP_000833.1 Glutamate Receptor 5	atccagttgc ccacgacccat gacgaccttt gccgaaatcc agcctctgcc ggccatcgaa gtcacgggcg gcgcgcagcc cgcgcgaggg gcgcgagcgg ctggggacgc ggcccgggag agccccggcg ccggtcccgga ggcgtcgggc gccaaagccag acctggagga gctggtggct ctcaccccg cgccccctt cagagactcg gtggactcgg ggagcacaac ccccaactcg ccagtgctcg agtcggccct ctgtatcccc cgtctcctca aatatgacac tcttatcata agagattaca ctacagctc ctgcgtgttg tgaatgtccc tggaaagcac gccggcctgc gcgtgcggag cggagcccc cgtgttcaca cacacacaa ccttaattgga aacacagatc agtagtgcta tacggcccc ggggaatatg ccaagggacc ccttaattgga aacacagatc agtagtgcta tctcatgaca accacaagaa accgacgaca aatcttttgc gagattttct tctagtggtc tagaaacatg gcttttaaga aacacggtga tatctttgag ggtgacaagg cgtctcttca aacagttcca taccaactgc ttgtctctag ggaagcagtg cgtgtgaaac agcgtaaagg agggtgaaga gcatagttaa taagcaactg taaaaagttt tatttgttta ctttaattct tttccccgtg aaaaagtttt atttggttac tttaattctt tccccagaaa agagtccttg attcaccaaa catgaatgta cttttctaa caaactcaaa atctgggacc aaacatcaa ctttttctt tctttttct tctttttgt ttcttcttc ctgtaaaagac cttgaaaaga ccttgaaaag cagtaacttg ggtccagtat ttacggaggc gttgtgaatg tgtcccatgc ataacacact actggatagt gagtcgtcg ctaatgtact acgtagggt tctaccagag atttctctt ccaattgggt tgtgaatac tcttccaaa gccctgcacg gggattccac ctacttatt cagattcacc tccattaacc aagaaaacca gtggaagatt tcttgactat ttcaccatgt tgccaatc	500833.1 Metabotropic NP_000833.1 Glutamate Receptor 5	mpgdiiigal fsvhhqptvd kvherkcgav p lgceirdscw hsaialeqsi efirdsliss sssvaiqvqn llqlfnipqi aysatsmdls wtyvsvavhte gnygesgmea fkdmshakegi arvvacfceg mtvrgllmam rrlglagefl spdvkwfddy yklrpetnh rnpwfqefwq hvqdskmgef inaiysmayg lhnmqmslcp gdtilfdeng dspgryeimn fkemgkdyfd csepcekgqi kvirkgevsc cwtctpcken qylrwgdpep iaavvfacig llatlftvv ctfcliaakpk qiycylorig iglspamsys caqlviafil icqlgiiva lfimeppdim ilscfyaafk trnvpanfne akyaftmyt tvalgcmfvp kviiilakpe rnvrfafts ssgetlssng ksvtwaqnek ssrgqhlwqr agagaggsag gvcatggagc agagpggpes stlshragas srtdddvpsl hsepfvarss aapspgvgap lcssylipke iqlfttmttf spaagpeaaa akpdelelva ltpspfrds rdytqsssl	Homo sapiens
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179	3098	Metabotropic Glutamate Receptor 6	NM_000843	cgaggcccg ggcaggccg ctgagctaac tcccagagc caagtggaa ggcgcccc	A	Homo sapiens
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				tggcgccgc ccgagagcc cggagaccgc tgcctgggc gctgctgcc ctggcgtggc		
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				ccaacgtgct gcgcctgtt gcgatacccc agatcagcta tgcctccaca gcccggagc		
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				agtacttcat gactcgatcc ctggagaaca accgcaggaa catctggttc cgcgagttct		
				gggaagagaa tttaactgc aaactgacca gctcaggtag ccagtcatg gattccaccc		
				gcaaatgcac aggcgaggaa cgcctcggcc gggactccac ctacgagcag gagggcaagg		
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				cgaccctcag ctactctgc ctgctacca agaccaaccg tatctaccg atcttgagc		
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				cacacagcgt gattgactat gaggaacagc ggacagtga ccccgagcag gccagagggg		
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180	3098	Metabotropic NP_000834.1 Glutamate Receptor 6	<p> tgggcctctc tggcaggaac tctgatgcac cgcgaggccc atgtactcct gtggctttct  cacattcggt ctacttgagc ggtatctcca cagcatgcac cattctgggt acagggggag  atcctctgtt actgaagatg ttgtcatatt tagtaccttc acaaggtttc tctccttcca  gaattttctg atgtacacaa ataactgact tccacaagag ggcttttcca cactcggtgt  gtgcatacag tttctgcctg tgatcatttc tttatgttat tttttattt tttcgagata  gggtcttgct caatttctta ggctggagtg cagtggcacg atcatagctc actgaagttt  cgacctgggc tcaagcaatc ctccgccttc agcctcctga gtagctgggt cgcacgacca  taccagcta atgttttatt tttgttagag acgaggtctc actatgttgc ccaggtggt  ctcgaacttc tgagctcgag cgatcctcct gcctccacct cccaaagtgt tcggattaca  aacgtgagcc atcgaccta gcctctttga tcatttctgt ggtgttcagt gggggttgac  agctccctaa agatttctct gtttttttgc atgcatgggt ttgaattctt tgaggtccaa  tttatttga cccctgaata aagttttgtg ggttttcttc tatgttgga attatatgg  cattctcca gtgtgggttc tcttatgtcg agtgagagct gacctgcacc gaagtttgtc  ccatttgtg ccttgaatt atctgtatga attatatgtt ccagtgaata tggagttctg  ggttgaggc ttattccatg ttacacacaa taaaattgca gtgttctct ctgggatgag  agctctaaag cagagtaaga ttacgttctg atgtaagctt taaccacct tttataaggt  ctcacctgtg gtccactgtg ttgagacttc tacagaagag cttctgtata gtaaccattt  tcttagctg tctcactgtg gtgaattcttc tgacacattt attatagctt tgtccattt  cttatcctt ttgctcttta gaaatttccc tttaatattat tacattcatt gcttactgta  aagagtccag gtaactgact ttaattcaag ttacttctg ttaataaat ttaacttttc  cc </p>	Homo sapiens
181	3099	Metabotropic NM_000844 Glutamate Receptor 7	<p> tgggcctctc tggcaggaac tctgatgcac cgcgaggccc atgtactcct gtggctttct  cacattcggt ctacttgagc ggtatctcca cagcatgcac cattctgggt acagggggag  atcctctgtt actgaagatg ttgtcatatt tagtaccttc acaaggtttc tctccttcca  gaattttctg atgtacacaa ataactgact tccacaagag ggcttttcca cactcggtgt  gtgcatacag tttctgcctg tgatcatttc tttatgttat tttttattt tttcgagata  gggtcttgct caatttctta ggctggagtg cagtggcacg atcatagctc actgaagttt  cgacctgggc tcaagcaatc ctccgccttc agcctcctga gtagctgggt cgcacgacca  taccagcta atgttttatt tttgttagag acgaggtctc actatgttgc ccaggtggt  ctcgaacttc tgagctcgag cgatcctcct gcctccacct cccaaagtgt tcggattaca  aacgtgagcc atcgaccta gcctctttga tcatttctgt ggtgttcagt gggggttgac  agctccctaa agatttctct gtttttttgc atgcatgggt ttgaattctt tgaggtccaa  tttatttga cccctgaata aagttttgtg ggttttcttc tatgttgga attatatgg  cattctcca gtgtgggttc tcttatgtcg agtgagagct gacctgcacc gaagtttgtc  ccatttgtg ccttgaatt atctgtatga attatatgtt ccagtgaata tggagttctg  ggttgaggc ttattccatg ttacacacaa taaaattgca gtgttctct ctgggatgag  agctctaaag cagagtaaga ttacgttctg atgtaagctt taaccacct tttataaggt  ctcacctgtg gtccactgtg ttgagacttc tacagaagag cttctgtata gtaaccattt  tcttagctg tctcactgtg gtgaattcttc tgacacattt attatagctt tgtccattt  cttatcctt ttgctcttta gaaatttccc tttaatattat tacattcatt gcttactgta  aagagtccag gtaactgact ttaattcaag ttacttctg ttaataaat ttaacttttc  cc </p>	Homo sapiens

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182	3099	Metabotropic NP_000835.1 Glutamate Receptor 7	tactgtgtat gccatcaaga ctcggggtgt acccgagaat ttaacgaag ccaagcccat tgattcact atgtacacga catgtatagt atggctgccc ttcattccaa tttttttgg caccgtcaa tcagcggaag agctctacat acaaaactacc acgtttacaa tctccatgaa cctaagtga tcagtggcgc tgggatgct atacatgcg aaagtgtaca tcatcatttt ccacctgaa ctcaatgtcc agaaacggaa gcgaagcttc aaggcggtag tcacagcagc caccatgtca tcgaggctgt cacacaaacc cagtgacaga cccaacggtg aggcaaaagac cgagctctgt gaaaacgtag accaaaacag ccctgctgca aaaaagaagt atgtcagtta taataacctg gtatatcaac ctgttccatt ccatggaacc atggaggagg aagaccctca gttatttgt caccacact ggcataggac tctttggtcc taccgcttc ccatcaccgg aggagcttcc cggcccgga gaccagtgt agaggatcca agcacctaa acagtgtctt tatgaaatat ccttacttta tctgggctta ataagtcact gacatcagca ctgcaactt ggctgcaatt gtggacctc cctaccacag ggagtgtga aactcaagtc cgcgccggc tctttagaat ggaccactga gagcacagg accgttttgg ggctgacctg tcttattacg tatgtacttc taggttgcaa ggttttgaaa tttctgttac agtttgtgag gacctttgca ctttgccatc tgatgtcgta cctcggttca ctgtttgttt tgaatgcct tgttttcata gagccctatt ctctcagacg gtggaatatt tggaaaaatt taaaacaat taaatttta aagcaatctt ggcagactaa aacaagtaca tctgtacatg actgtataat tacgattata gtaccactgc acatcatgtt tttttttttt aagacaaaaa agatgtttta agacaaaaa ctgtgctgag aagtatgccc ccactatct ttggtatatg ataggttaca taaaagggaag gtattggctg aactgaatag aggtcttgat ctttggaatg catgccagta atgtatttta cagtacatgt ttattatgtt caatatgtt atttgtgttc tcttttgta ttttaatta gggtatatga atattttgca ataattttta taattattaa gctgtttgaa ggaagaata tggatttttc atgtcttgag gttttgttca tgcaccttt gactgatcag tgtataagg actttaggaa aaaaagcatg tatgtttttt actgttttga ataagtactt tegttaactt tgctgcttat gtgccaattt agtggaaaaa acaaacctt gctgaaaaat tccctcttc cattctctt caattctgt atattgtcca agaattgata aataaggaaat tc MVQLRKLRLV LTLMKFPCCV LEVLICALAA AARGQEMYAP HSIRIEGDTV LGGLFPVHAK P GPSGVPCGDI KRENGIHRLE AMLYALDQIN SDPNLLPNVT LGARILDTC RDTVALEQSL TFVQALIQKD TSDVRCTNGE PPVFKPEKV VGVIGASGSS VSIMVANILR LFQIPQISYA STAPELSDDR RYDFFSRVVP PDSFOAQAMV DIVKALGWNY VSTLASEGSY GEKVESFTQ ISKEAGGLCI AQSVRIPOER KDRTIDFDRI IKQLLDTNPS RAVVIFANDE DIKQILAAK RADQVGHFLW VGSDSWGSKI NPLQHEDIA EGATIQPKR ATVEGFDAYF TSRTLENNRR NVWFAEYWEE NFNCKLTISG SKKEDTRKC TGQERIGKDS NYEQEGKVQF VIDAVYAMAH ALHHMNKDL C ADYRGVCPEM EQAGGKKLLK YIRNVNFGS AGTPVMENKN GDAPGRYDIF QYQTTNTSNP GYRLIGQWTD ELQNIEDMQ WGKGVREIPA SVCTLPCKPG QRKKTQKGT CCWTCEPCDG YQYQFDEMT C QHCPYDQPN ENRTGCCDIP IIKLEWHSPW AVIPVELAML GIATIFVMA TFIRYNDTPI VRASGRELSY VLLTGIFLCY IITFLMIAP DVAVCSFRRV FLGLGMCISY AALLTKTNRI YRIFEGGKKS VTAPRLISPT SQLAITSSLI SVQLLGVFIW FGVDPNNIII DYDEHKTMNP EQARGVLKCD ITDLQIICSL GYSILLMVT C TVYAIKTRGV PENFNEAKPI GFTMYTTCIV WLAFIPIFFG TAQSAEKLVI QTTTLTISMN LSASVALGML YMPKVYIIIF HPFLNVQKRK RSFKAUVTAA TMSRLSHKP SDRPNGEAKT ELCENVDPNS	Homo sapiens
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183	3100	Metabotropic Glutamate Receptor 8	PAKKYVSY NNIVI	Homo sapiens
			tgctgtgtg caagaataaa ctttgggtct tgattgcaa taccacctgt ggagaaaaatg A	
			gtatgcgagg gaaagcgatc agcctcttgc ccttgtttct tcctcttgac cgccaagtctc	
			tactggatcc tcacaatgat gcaagaact cacagccagg agtatgccc ttccatacgg	
			gtgatgggg acattatttt ggggggtctc ttccctgtcc acgcaagggt agagagaggg	
			gtgccttgtg gggagctgaa gaagaaaaag gggattcaca gactggaggc catgctttat	
			gcaattgacc agattaacaa ggacctgat ctcctttcca acatcactct ggggtgccgc	
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			gcattaatag agaaagatgc ttcggtatgtg aagtgtgcta atggagatcc accattttc	
			accaagcccg acaagatttc tggcgtcata ggtgctgcag caagctccgt gtccatcatg	
			gttgctaaca ttttaagact ttttaagata cctcaaatca gctatgcac cagagcccca	
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			ctcatctccg tccagctcct tggagtgttt gtctggtttg ttgtggatcc cccccacatc	
			atcattgact atggagagca gcggacacta gatccagaga aggccagggg agtgctcaag	
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184	3100	Metabotropic NP_000836.1 Glutamate Receptor 8	actgttactg tttatgcaa taaacagaga ggtgtccag agactttcaa tgaagccaaa cctattgat ttaccatgta taccactgc atcatttggg tagctttcat ccccatctt tttggtagc cccagtcagc agaaaagatg tacatccaga caacaacact tactgtctcc atgagtttaa gtgcttcagt atctctgggc atgctctata tgcccaaggt ttattattata atctttcatc cagaacagaa tgttcaaaaa actgatccaa aaggaaatg acagacaaa tggcgagggtg gctgccacca tgcaaaagcaa actgatccaa aacacttctt ctaccaagac aacatatatc aaaagtgaac tctgtgagag tcttgaacc aacacttctt ctaccaagac aacatatatc agttacagca atcattcaat ctgaaacagg gaaatggcac aatctgaaga gacgtgggtat atgatcttaa atgatgaaca tgagaccgca aaaattcact cctggagatc tccgtagact acaatcaatc aaatcaatag tcagtcttgt aaggaaacaa aattagccat gagccaaaag tatcaataaa cggggagtga agaaaccgtg ttatacaat aaaaccaatg agtgcacagc taaagtattg cttattcatg agcagttaaa acaaatcaca aaagaaaaac taatgttagc tcgtgaaaaa aatgctgttg aaataataaa tgtctgatgt tattcttgta ttttctgtg attgtgagaa ctcccgcttc tgcctccatc tgtttaactt gtataagaca atgagctctgt ttcttgtaat ggtgaccag attgaagccc tgggttggtgc taaaaataaa tgcaatgatt gatgatgca atttttata caataaattt atttctaata ataaaggaat gttttgcaaa aaaaaaaaa aaaaactcga g	Homo sapiens
185	3212	Opioid mu-type Receptor	ggaattccgg ctataggcag aggagaatgt cagatgctca gctcgtctcc ctccgcctga A cgctcctctc tgtctcagcc agactgggt tctgtgaaga acagcaggag ctgtggcagc ggcgaagga agcggctgag gcgcttgga cccgaaaagt ctcggtgctc ctggctacct cgacacagcg tgcgcgccc gccgtcagta ccatggacag cagcgtgccc cccacgaacg ccagcaattg cactgatgcc ttggcgctact caagtgtctc cccagcacc agccccggtt cctgggtcaa cttgtccac ttagatggca acctgtccga ccatgtcggt ccgaaccgca ccaacctggg cgggagagac agcctgtgcc ctccgaccgg cagtcctccc atgatcacg ccatcacgat catggccctc tactccatcg tgtgcgtggt ggggctcttc ggaactctc	Homo sapiens

186	3212	Opioid mu- type Receptor	NP_000905.1	MDSSAAPTNA PTGSPSMITA STLPFQSVNY RTPRNRKAIIN FAFIMPVLII YVTIKALVTI EQQNSTRIRQ	SNCTDALAYS ITIMALYSIV LMGTWPFGTI VCNWLISAI TVCYGLMLR PETTFQVSW NTRDHPSTAN	SCSPAPSPGS CWGLFGNFI LCKIVISIDY GLPVMFMATT LKSVRMLSGS HFCIALGYTN TVDRTNHQLE	WVNLSHLDGN VMYVIVRYTK YNMFTSIFTL KYPQGSIDCT KEKDRNLRI SCINPVLVAF NLEAETAPLP	LSDPCGPNRT MKTATNIYIF CTMSVDRYIA LTFSHPTWYW TRMVLVVAV LDENFKRCFR EFCIPTSSNI	NLGGRDSLCP NLALADALAT VCHPVKALDF ENLVKICVEI FIVCWTPHI FIVCWTPHI FIVCWTPHI	Homo sapiens
187	3223	Muscarinic acetylcholin e Receptor M1	NM_000738	atgaacactt gggtccctggc acagggaacc aactacttcc ctctatacca	cagccccacc aagtggcctt tgctgttact tgctgtgact cgtacctgct	tgctgtcagc catgggatac catctcttcc ggcctgtgct catggggccac	cccaacatca accacgggcc aaggtcaaca gacctcatca tggtgtctgg	ccgtctctggc tctgtctgct cggagctcaa tggtgtactt gcacgtctgg	accaggaaag agccacagt gacagtcaat ctccatgaac ttgtgacctc	Homo sapiens

Accession	Gene	Protein	Sequence	Species
188	3223	Muscarinic acetylcholin e Receptor M1	NP_000729.1	Homo sapiens
			<p>tggtggccc tggactatgt ggcagcaaat gctccgta tgaatctgt gctcatcagc</p> <p>tttgaccgct acttctcgt gactcggccc ctgagctacc gtgccaagcg cacaccccg</p> <p>cgggcagctc tggatgatcg cctggcctgg ctggtttcct ttgtgctctg ggccccagcc</p> <p>atcctcttct ggcagtaact ggtaggggag cggacgatgc tagctgggca gtgctacatc</p> <p>cagttcctct ccagcccat caccctttt ggcacagcca tggctgctt ctacctccct</p> <p>gtcacagtca tgtgacgct ctactggcgc atctaccggg agacagagaa ccgagcacgg</p> <p>gagctggcag ccttcaggg ctcgagacg ccaggcaaa ggggtggcag cagcagcagc</p> <p>tcagagaggt ctacgaccag gctgagggc tcaccagaga ctctccagg cggctgctgt</p> <p>cgctgctgcc gggccccag gctgctgag ccctacagct ggaaggaga agaggaagag</p> <p>gacgaaggct ccatggagtc cctcacatcc tcagagggag aggagcctgg ctccgaagtg</p> <p>gtgatcaaga tgccaatggt ggaccggag gcacaggccc ccaccaagca gccccacgg</p> <p>agctcccaa atacagtcaa gggccgact aagaaaggc gtgatcgagc tggcaagggc</p> <p>cagaagcccc gtggaaggga gcagctggcc aagcggaaga ccttctcgt ggtcaaggag</p> <p>aagaaggcgg ctcgaccct gactggcctc ctctggcct tcactctcac ctggacacgg</p> <p>tacaacatca tggctgctgt gtccacctc tgcaaggact gtgtccccg gacctgtgg</p> <p>gagctgggct actggctgtg ctacgtcaac agcaccatca acccatgtg ctacgcactc</p> <p>tgcaacaaa ccttcgggga cactttcgc ctgctgctgc ttgcccgtg ggacaagaga</p> <p>cgctggcgca agatcccaa ggcctctggc tccgtgcacc gactccctc ccgcaatgc</p> <p>tga</p>	
			<p>NTSAPPAVS PNITVLAPGK GPWQVAFIGI TTGLLSLATV TGNLLVLISF KVNTELKTVN P</p> <p>NYFLLSLACA DLIIGTFSMN LYTYLLMGH WALGTLACDL WLALDYVASN ASVMNLLIS</p> <p>FDRYFSVTRP LSYRAKTRPN RAALMIGLAW LVSFVLWAPA ILFWQYLVGE RTMLAGQCYI</p> <p>QFLSQPIITF GTAMAAFYLP VTVMCTLYWR IYRETEENR ELAALQGSET PGKGGSSSSS</p> <p>SERSQPGAEG SPETPPGRCC RCCRAPRLIQ AYSWKEEEEE DEGSMEISLTS SEGEPPGSEV</p> <p>VIKMPMVDPE AQPTKQPPR SSPNTVKRPT KKGRDRAGKG QKPRGKEQLA KRRTFSILVKE</p> <p>KKAARTLSAI LLAFLITWTP YNIMVLVSTF CKDCVPETLW ELGWLVCYN STINPMCYAL</p> <p>CNKAFRDTR LLLLCRWDRK RWRKIPKRPV SVHRTPSRQC</p>	
189	3224	Muscarinic acetylcholin e Receptor M2	NM_000739	Homo sapiens
			<p>atgaataact caaaaaact ctctaaact agcctggctc ttacaagtcc ttataagaca A</p> <p>tttgaagtgg tgtttattgt cctgggtggt ggtacccctca gtttgggtgac cattatcggg</p> <p>aacatccctag tcatggtttc cattaaagt caccgccacc tcacagaccgt caacaattac</p> <p>tttttattca gcttggcctg tctgacactt atcatagggt ttttctccat gaactgtgac</p> <p>acctctaca ctgtgattgg ttactggcct ttgggacctg tgggtgtgta cctttgggcta</p> <p>gcctgggact atgtggtcag caatgcctca gttatgaatc tgctcatcat cagctttgac</p> <p>aggtacttct gtgtcacaaa acctctgacc taccagtcga agcggaccac aaaaatggca</p> <p>ggtatgatga ttgcagctgc ctgggtcctc tctttcatcc tctgggctcc agccattctc</p> <p>ttctggcagt tcattgtagg ggtgagaact gtggaggatg gggagtgtca cattcagttt</p> <p>ttttccaatg ctgctgtcac ctttggtagc gctattgcag ccttctattt gccagtgtac</p> <p>atcatgactg tgctatatgg gcacatatcc cgagccagca agagcaggat aaagaaggac</p> <p>aagaaggagc ctgttgccaa ccaagacccc gtttctccaa gtctgtgata aggaaggata</p> <p>gtgaagccaa acaataacaa catgcccagc agtgacgatg gctggagca caaaaaatc</p> <p>cagaatggca aagccccag ggtcctgtg actgaaaaact gtgttcaggg agaggagaag</p>	



190	3224	Muscarinic acetylcholin e Receptor M2	NP_000730.1	<p>           gagagctcca atgactccac ctacgtcagt gctgtgcct ctaatatgag agatgatgaa            ataaccagg atgaaaacac agtttccact tccctgggcc attccaaaga tgagaactct            aagcaaacat gcatcagaat tggcaccag acccaaaa gtgactcatg taccacaact            aataccaccg tggaggtagt ggggtcttca ggtcagaatg gagatgaaaa gcagaatatt            gtagcccgca agattgtgaa gatgactaag cagctgcaa aaaagaagcc tctccttcc            cgggaaaaga aagtcaccag gacaatcttg gctattctgt tggctttcat catcacttgg            gcccataca atgtcatggt gctcattaac accttttgg caccttgcac cccaacact            gtgtggacaa ttggttactg gctttgttac atcaacagca ctatcaaccc tgcctgctat            gcactttgca atgccacctt caagaagacc tttaaacacc ttctcatgtg tcattataag            aacataggcg ctacaaggta a            MNNSTNSSNN SLALTSPYKT FEWVFIVLVA GSLSLVTIIG NILVMVSIKV NRHLQTVNNY P            FLFSLACADL IIGVFSMNLV TLYTVIGYWP LGPVVCIDLWL ALDYVVSNAS VMNLLIISFD            RYFCVTKPLT YPVKRTTKMA GMIAAAWVL SFILWAPAIL FWQFIVGVRT VEDGECYIQF            FSNAAVTFTG AIAAFYLPVI IMTVLYWHIS RASKSRIKKD KKEPVANQDP VSPSLVQGRI            VKPNNNNMPS SDDGLEHNI QNGKAPRDPV TENCVOGEEK ESSNDSTSVS AVASNMRRDDE            ITQIDENTVST SLGHSKDENS KQTCIRIGTK TPKSDSCTPT NTTVEVVGSS GONGDEKQNI            VARKIVKMTK QPAKKKPPPS REKKVTRTIL AILLAFIITW APYNVMVLIN TFCAPCIPNT            VWTIGYWLKY INSTINPACY ALCNATFKKT FKHLMLCHYK NIGATR            CCTGGCAGTG CCGATGTTCC GATACTGGCA CAGCAGCAGG TGCCGGAAGG TCTTTTAAA A            GGTGGCGTTG CACAGAGCAT AGCAGGCAGG GTTGATGGTG CTGTTGACGT AGCAGAGCCA            GTAGCCAAATG GACCACACCG GGTGAGGAT GTCAGGCTGG CAGAAGGTGT TCACCAGGAC            CATGACGTTG TGAGCGCTCC CCGTGAGGAT GAAAGCTAAC ANAATGGCAA AGATCGGTGCG            TGGCACTTTG CGTCCCGGGG CCCGCATCTG CCGCTTTCTG GCACCTGGG TGCAGGCGAT            GCTAGCGAAC TTGCGGGCCA CGTTGGCCGC AGCGGCATGC CAGNCGGCGT GGGAGGGACA            ATCTCAGGGC TGGCACACAC TCATGGGCTG GCTGGCTTGG TCAAATTTTG GATCTTGGAC            CATCTGGGAG GCTTGGTTGA AGGCCCCCGG CTCGGACTTG CGGGCATGAA TCCAGGCCCTT            ACTCTANAGG ATCCCCCCCCT CTCC            atgggcaact tcacacctgt caatggcagc tcgggcaate agtccgtgcg cctgggtcacg A            tcatcatccc acaatcgcta tgagacggtg gaaatggtct tcatggccac agtgacaggc            tccctgagcc tggtagctgt cgtgggcaac atcctggtga tgctgtccat caaggtcaac            aggcagctgc agacagtcaa caactacttc ctcttcagcc tggcgtgtgc tgatctcatc            ataggcgct tctccatgaa cctctacacc gtgtacatca tcaagggcta ctggccccgtg            ggcgccgtgg tctgcgacct gtggctggcc ctggactacg tggtagcaa cgcctccgtc            atgaaccttc tcatcatcag ctttgaccgc tacttctgcg tcaccaagcc tctcacctac            cctgccccgc gcaccaccaa gatggcagc ctcattgattg ctgctgcctg ggtactgtcc            ttggtgctct gggcgcctgc catcttgttc tggcagtttg tgggtggtaa gcgacgggtg            cccgacaacc actgcttcac ccagttcctg tccaaaccag cagtgacctt tggcacagcc            attgctgcct tctacctgcc tbtggtcatc atgacggtgc tglacatcca catctccctg            gccagtgcga gccgagtcca caagaccgg cccgagggcc cgaaggagaa gaaagccaaag            acgctggcct tctcaagag cccactaatg aagcagagcg tcaagaagcc ccgcccggga            ggccgcccgg gaggactgcg caatggcaag ctggaggagg cccccccg ccgctgcca         </p>	Homo sapiens
191	3226	Muscarinic acetylcholin e Receptor M4	LG1143	<p>           CCTGGCAGTG CCGATGTTCC GATACTGGCA CAGCAGCAGG TGCCGGAAGG TCTTTTAAA A            GGTGGCGTTG CACAGAGCAT AGCAGGCAGG GTTGATGGTG CTGTTGACGT AGCAGAGCCA            GTAGCCAAATG GACCACACCG GGTGAGGAT GTCAGGCTGG CAGAAGGTGT TCACCAGGAC            CATGACGTTG TGAGCGCTCC CCGTGAGGAT GAAAGCTAAC ANAATGGCAA AGATCGGTGCG            TGGCACTTTG CGTCCCGGGG CCCGCATCTG CCGCTTTCTG GCACCTGGG TGCAGGCGAT            GCTAGCGAAC TTGCGGGCCA CGTTGGCCGC AGCGGCATGC CAGNCGGCGT GGGAGGGACA            ATCTCAGGGC TGGCACACAC TCATGGGCTG GCTGGCTTGG TCAAATTTTG GATCTTGGAC            CATCTGGGAG GCTTGGTTGA AGGCCCCCGG CTCGGACTTG CGGGCATGAA TCCAGGCCCTT            ACTCTANAGG ATCCCCCCCCT CTCC            atgggcaact tcacacctgt caatggcagc tcgggcaate agtccgtgcg cctgggtcacg A            tcatcatccc acaatcgcta tgagacggtg gaaatggtct tcatggccac agtgacaggc            tccctgagcc tggtagctgt cgtgggcaac atcctggtga tgctgtccat caaggtcaac            aggcagctgc agacagtcaa caactacttc ctcttcagcc tggcgtgtgc tgatctcatc            ataggcgct tctccatgaa cctctacacc gtgtacatca tcaagggcta ctggccccgtg            ggcgccgtgg tctgcgacct gtggctggcc ctggactacg tggtagcaa cgcctccgtc            atgaaccttc tcatcatcag ctttgaccgc tacttctgcg tcaccaagcc tctcacctac            cctgccccgc gcaccaccaa gatggcagc ctcattgattg ctgctgcctg ggtactgtcc            ttggtgctct gggcgcctgc catcttgttc tggcagtttg tgggtggtaa gcgacgggtg            cccgacaacc actgcttcac ccagttcctg tccaaaccag cagtgacctt tggcacagcc            attgctgcct tctacctgcc tbtggtcatc atgacggtgc tglacatcca catctccctg            gccagtgcga gccgagtcca caagaccgg cccgagggcc cgaaggagaa gaaagccaaag            acgctggcct tctcaagag cccactaatg aagcagagcg tcaagaagcc ccgcccggga            ggccgcccgg gaggactgcg caatggcaag ctggaggagg cccccccg ccgctgcca         </p>	Homo sapiens
192	3226	Muscarinic acetylcholin e Receptor M4	NM_000741	<p>           atgggcaact tcacacctgt caatggcagc tcgggcaate agtccgtgcg cctgggtcacg A            tcatcatccc acaatcgcta tgagacggtg gaaatggtct tcatggccac agtgacaggc            tccctgagcc tggtagctgt cgtgggcaac atcctggtga tgctgtccat caaggtcaac            aggcagctgc agacagtcaa caactacttc ctcttcagcc tggcgtgtgc tgatctcatc            ataggcgct tctccatgaa cctctacacc gtgtacatca tcaagggcta ctggccccgtg            ggcgccgtgg tctgcgacct gtggctggcc ctggactacg tggtagcaa cgcctccgtc            atgaaccttc tcatcatcag ctttgaccgc tacttctgcg tcaccaagcc tctcacctac            cctgccccgc gcaccaccaa gatggcagc ctcattgattg ctgctgcctg ggtactgtcc            ttggtgctct gggcgcctgc catcttgttc tggcagtttg tgggtggtaa gcgacgggtg            cccgacaacc actgcttcac ccagttcctg tccaaaccag cagtgacctt tggcacagcc            attgctgcct tctacctgcc tbtggtcatc atgacggtgc tglacatcca catctccctg            gccagtgcga gccgagtcca caagaccgg cccgagggcc cgaaggagaa gaaagccaaag            acgctggcct tctcaagag cccactaatg aagcagagcg tcaagaagcc ccgcccggga            ggccgcccgg gaggactgcg caatggcaag ctggaggagg cccccccg ccgctgcca         </p>	Homo sapiens

193	3226	Muscarinic acetylcholin e Receptor M4	NP_000732.1	MANFPTVNGS RQLQTVNNYF LFSLACADLI YFCVTKPLTY SNPAVTFGTA KQSVKKPRPG ELSTTEATTP NVARKEFASIA RNOVRKKRQM CYVNSTINPA CYALCNATEFK KTFRHLILLCQ YRNIGTAR	cgccaccgc gccccgtggc tgataaggac acttccaatg agtccagctc aggcagtgcc accagaaca ccaaggaacg ccagaccaca gagctgtcca ccacagaggc caccactccc gccatgcccg cccctccctt gcagccgagg gccctcaacc cagcctccag atggtccaag atccagattg tgacgaagca gacaggcaat gagtgtgtga cagccattga gattgtgctt gccacgcccg ctggcatggc cctgcgggc aacgtggccc gaaagtgcg cagcatcgct cgcaaccagg tgcgcaagaa gcggcagatg gcggcccggg agcgcaaatg gacacgaacg atctttgcca ttctgctagc cttcaccctc acctggagcg cctacaacgt catggtcctg gtgaacacct tctgccagag ctgcaccctt gacacggtgt ggtccattgg ctactggctc tgtctacgtca acagaccat caacctggc tgtctatgctc tgtgcaacgc cacttttaa aagaccttc ggcacctgct gctgtgccag tatcggaaca tcggcactgc caggtag MANFPTVNGS SGNSQSVRLVT SSSHNRYETV EMVFIATVTG SLSLTVVGN ILVMSIKVN P RQLQTVNNYF LFSLACADLI IGAFSMNLTY VYIKGYWPL GAVVCDLWLA LDYVVSNASV MNLIIISFDR YFCVTKPLTY PARTTKMAG LMIAAAWVLS FVLWAPAILF WQFVVGKRTV PDNHCFLQFL SNPAVTFGTA IAAFYLPVVI MTLVYIHISL ASRSRVHKHR PEGPKEKKAK TLAFLKSPLM KQSVKKPRPG GRPGGLRNGK LEEAPPALP PPPRPVADKD TSNESSGSA TONTKERPAT ELSTTEATTP AMPAPPLQPR ALNPASRWSK IQIVTKQTGN ECVTAIEIVP ATPAGMRPAA NVARKEFASIA RNOVRKKRQM AARERKVTRT IFAILLAFIL TWTPYNNMVL VNTFCQSCIP DTVMSIGIWL CYVNSTINPA CYALCNATEFK KTFRHLILLCQ YRNIGTAR	Homo sapiens
194	3227	Muscarinic Acetylcholin e Receptor M5	NM_012125	atggaagggg attcctacca caatgcaacc accgtcaatg gcacccagct aaatcaccag A cccttggaac gccacaggtt gtgggaagtc atcaccattg cactgtgac tgctgtggtg agcctgatca ccattgtggg caatgtcttg gtcagtatct ccttcaaatg caacagccag ctcaagacag ttaacaacta ttacctgtc agcttagcct gtgcagatct catcattgga atcttctcca tgaacctcta caccacctac atcctcatgg gacgtgggc tctcgggagt ctggcttggtg acctttggct tgcaactggac tacgtggcca gcaacgcttc tgtcatgaac cttctgttga tcagttttga ccgttacttt tccatcacaa gaccttgac atatcggggc aagcgtactc cgaaaagggc tggcatcatg attggcttgg cctggctgat ctcttcatc ctctgggcc cagcaatcct ctgctggcag tacttggttg ggaagcggac agttccactg gatgagtgc agatccagtt tctctctgag cccaccatca cttttggcac tgccattgct gccttctaca tccctgttcc tgtcatgacc atcctctact gtcgaatcta ccgggaacaa gagaagcgaa ccaaggacct ggctgacctc cagggttctg actctgtgac caaagctgag aagagaaagc cagctcatag ggctctgttc agatcctgct tgcgtgtcc tcgacccacc ctggccccg gggaaaaggaa ccaggcctcc tggtaactct ccgcagagg cactccacc actgggaagc catcccaagc cactggccca agcgccaatt gggccaaagc tgagcagctc accacctgta gcagctacc ttcctcagag gataggaca agcccgccac tgacctgtc ctccaagtgg tctacaagag tcagggttaag gaaagccag ggaagaatt cagtgtgaa gagactgagg aaacttttgt gaaagctgaa actgaaaaaa gtgactatga caccctaaac taccttctgt ctccagcagc tgctcataga ccaagagtc agaatgtgt ggcctataag ttccgattgg tggtaaaagc tgacgggaac caggagacca caaatggctg tcacaaggtg aaaatcatgc cctgccccctt cccagtggc aggaacott caacgaaagg cctcaatccc aaccacagcc atcaaatgac caaacgaaag agagtgttcc tagtcaaaga gaggaagca gccacagac tgagtggcat tctcctggcc ttcactatca catggacccc gtataacatc	Homo sapiens	

195	3227	Muscarinic Acetylcholin e Receptor M5	NP_036257.1	MEGDSYHNAT TVNGTPVNHQ LKTVMNYLL SLACADLIIG LLVISFDRYF SITRPLTYRA DECQIQFLSE PTITFGTAIA KRKPAHRAIF RSCLRCPRT TTCSSYPSSE DEDKPADPV YLLSPAAHR PKSQCVAHK NP SHQMTKRK RVVLV YWL CYVNSTV NPICYALCNR TFKTFKMLL LCRWKKKKVE EKL YWQGNSK LP	ctgtgacaag tbtgtcccaag tagcactgtc aacccatct gatgtgctt ctctgccgat gaacagcaag ctaccctga PLERHRLWEV ITIAAVTAVV ILGMRWALGS LACDLWLALD IGLAWLISFI LWAPAILCWQ ILYCRIRYRET EKRTKDLADL WSSSRSTST TGKPSQATGP ESPGEEFSAE ETEETFVKA QETNNGCHKV KIMPCFP FVVA KEPTKGLNP MVLVSTFCDK CVPVTL MHLG	SLITIVGNVL VMISFKVNSQ LACDLWLALD YVASNASVMN LWAPAILCWQ YLVGKRTVPL EKRTKDLADL QGSDSVTKAE TGKPSQATGP SANWAKAEQL ETEETFVKA TEKSDYDTPN KIMPCFPVA KEPTKGLNP MVLVSTFCDK CVPVTL MHLG	Homo sapiens
196	3378	Tachykinin Receptor 3	NM_001059	atgggtcctgg tttctacctt gctatgtcaa tagcactgtc agaccttaa gatgtgctt actggtcagg gaacagcaag ctaccctga TVNGTPVNHQ SLACADLIIG SITRPLTYRA PTITFGTAIA RSCLRCPRT DEKPADPV PKSQCVAHK RVVLV NPICYALCNR TFKTFKMLL LCRWKKKKVE EKL YWQGNSK LP	ctgtgacaag tbtgtcccaag tagcactgtc aacccatct gatgtgctt ctctgccgat gaacagcaag ctaccctga PLERHRLWEV ITIAAVTAVV ILGMRWALGS LACDLWLALD IGLAWLISFI LWAPAILCWQ ILYCRIRYRET EKRTKDLADL WSSSRSTST TGKPSQATGP ESPGEEFSAE ETEETFVKA QETNNGCHKV KIMPCFP FVVA KEPTKGLNP MVLVSTFCDK CVPVTL MHLG	SLITIVGNVL VMISFKVNSQ LACDLWLALD YVASNASVMN LWAPAILCWQ YLVGKRTVPL EKRTKDLADL QGSDSVTKAE TGKPSQATGP SANWAKAEQL ETEETFVKA TEKSDYDTPN KIMPCFPVA KEPTKGLNP MVLVSTFCDK CVPVTL MHLG	Homo sapiens

197	3378	Tachykinin Receptor 3	NP_001050.1	aaggtagtgt ataaatgtga caaagacact aataacatgt tagcctccac ccaaaataaa atgggcttta aattt MATLPAETW IDGGGGVGAD AVNLTASLAA GAATGAVETG WLQLLDQAGN LSSPSALGL P PVASPAPSQ WANLTNQFVQ PSWRIALWSL AYGVVAVAV LGNLIVIIWII LAHKRMRTVT NYFLVNLAFS DASMAAFNTL VNFYALHSE WYFGANVCRF QNFFPITAVF ASIYSMTAIA VDRYMAIIDP LKPRLSATAT KIVIGSIWIL AFLLAFOQL YSKTKVMPGR TLCFVQWPEG PKQHFTYHII VIILVYCFPL LIMGITYTIV GITLWGSEPL GFTCDKYHEQ LKAKRKVVKM MIIIVMTFAI CWLPYHIYFI LTAIYQQLNR WKYIQVYLA SFWLAMSSTM YNPIIYCCLN KRFRAGFKRA FRWCPFIKVS SYDELELKT RFHPNRQSSM YTVTRMESMT VVEDPNDADT TRSSRKKRAT PRDPSFNGCS RNSKKSASAT SSFISPYTS VDEYS	Homo sapiens
198	3380	Neuromedin B Receptor	NM_002511	gtgctgtgag gcttgccgc ggacagtaaa cttgcagggg cgagaggag ggacatcgat A taaacctaaa tcgtgggcgt tcagtcctca gggcaccgag cgcgtgaaaa ctccagcga ctctgctgga aaggagatca tgccctctaa gtccctctcc aacctctcg tgaccaccgg cggaatgag agcggttccg ttcccgaggg gtggaaaagg gatttcctgc cgccctcgga cgggaccacc acggagttgg tgatccgctg tgtagtcccg tccctctacc tgctcatcat caccgtgggc ttgctgggca acatcatgct ggtgaagatc ttcatacca acagcgccat gaggagcgtc cccaacatct tcatctctaa cctggcgcc gggacttgc tgctgctgct cacctgcgtc cgggtggag cctgcgcgta cttcttcgac gagtggatgt ttggcaaggt gggtgcaaa ctgataccctg tcatccagct cacttcctg ggggttccg tgttccactct cactgccctc agcgccgaca ggtacagagc catcgttaac cccatggaca tgcagacgtc aggggcattg ctgcggacct gtgtgaaggc catgggtatc tgggtggctc ccggtgtgct ggcagttccc gaagcgggtg tttagaagt ggctgcgcat agtagcttg ataatagcag cttcacagca tgtatcccat accctcaaac agatgaatta catccaaaga ttcattcagt gctcatttct ttggtctatt tctcatatcc acttgctatt attagcattt attattatca tattgcaaa accttaatta aaagcgaca caatcttctt ggagaataca atgaacatac caaaaaacag atggaaacac ggaacgcct ggctaaaatt gtgcttctgt ttgtgggctg tttcatcttc tgttggttcc caaacacat cctttacatg tatcgggtct tcaactataa tgagattgat ccatctctag gccacatgat tgtcacctta gttgcccggt tctcagttt tggcaattct tgtgtcaacc catttgctct ttacctactc agtgaaaagt tcaggaggca tttcaacagc caactctgct gtggaggaa gtccatcaaa gagagaggaa ccagctacct actcagctct tcagcgtgc gtatgacatc tctgaaaagc aatgctaaga acatggtgac caattctgtt ttactaaatg ggcacagcat gaagcaggaa atggcaatgt gattttggcc attcaactca ctacctggag agaacttagt aa MPSKSLSNLS VTTGANESGS VPEGERDEL PASDGTTEL VIRCVIPSLY LLIITVGLL P NIMLVKIFIT NSAMRSVPNI FISNLAAGDL LLLITCVPVD ASRYFFDEWM FGKVGCKLIP VIQLTSVGS VFTLTALSAD RYRAIVNPM QOTSGALLRT CVKAMGIWV SVLLAVPEAV FSEVARISL DNSSFTACIP YPQDELHPK IHSVLIPLVY FLIPLAIISI YYYHIAKTLI KSAHNLPGY NEHTKKQMET RKRLAKIVLV FVGFIFCWF PNHILMYRS FNYNEIDPSL GHMIVTLVAR VLSFGNSCVN PFALYLLSES FRHENSQLC CGRKSQERG TSYLLSSAV RMTSLKSNK NMVTNSVLLN GHSMKQEMAM	Homo sapiens
199	3380	Neuromedin B Receptor	NP_002502.1		Homo sapiens

200	3404	Neuropeptide Y Receptor Type 2	A	Homo sapiens
NM_000910			<p> tatactatcc ctatcctagc ttttaacctg agccagagct cactacacag gtctctggct  atcgagtctg aatctgcact actcaactta taaactgtct gcagacacct gttaggaaa  ttgtgatca tggcgccgag gatctgaact cgtttacct tcttgtttg agcacagga  ccgccagct agaggagcac cagcgcaactg cgtccacgcc ctggcgagg gtgcggagga  tttgttctcg gtgcaatcct gctggcgctt ttccggggtt ctgcgagat ccagctcccc  atctctgctc ctacacacac aaagaaaaa aactctcgat tggaaattgt ggaatttct  cagccccac gaggcgagg gattctccag ccccgccct cctcccgcca gctgaggtc  tcttgcctc gctgccttg ctagggaaccg cagtcctca gccgcagctg ggtctgtccg  ccccgcttt gccctgcct tttcccgagg cggatttggg gaagtcggcc tcaagtccag  gaggtctgtc ttgcgcggc cagctctgc ggaactggg ggtagagagc aaaggagag  atctgtgaa gggaaggag gtagggttg cgcaaacgc cagagtatca aacttgggg  tggcacagta ggtgacagca gcagctgcag gtggtggctg gggacccgc aggggcgccc  cctctgggta ggtctggct gagcgggctt gcaagcccg gagcggtg agagaccctg  gacactgtc ctgctccct gccacaaaa cttctctcc agtccctcc cctgcaggac  catcgcccg agcctctgca cctgttttct tgtgtttaag ggtggggtt gcccccctcc  ccacgtccc atctctgac cteccacctt caccgcaca ccccgagat ggtgcggtg  ccagggcgg cttggcctga gaggtcggca gcagaccgg cagcgccaac cgccagccg  ctctgactg tccggctgccc cgcgcgcgc gcgcggtg tcttgacc taggagggga  cggaaccga cttgccttg ggcaccttc agggccctct ccaggtcggc tggctaata  tcggacagac ggaactgaca catcttgtt ccgctctcc gcaaaaacgc gaggtccagg  tcagttgtag actctgtgc tgggtgcagg ccaagtggac cgtlactgaa aatgggtcca  ataggtgcag aggtgatga gaaccagaca gtggaagaaa tgaaggtgga acaatacggg  ccacaaaca cctctagagg tgaactggtc cctgacctg agccagagct tatagatagt  accaagtga ttgaggtaca agttgttctc atattggctt actgtctccat catcttgcct  ggggtaatg gcaactcctt ggtgatccat gtggtgatca aattcaagag catgcgaca  gtaaccaaact ttttcattgc caatctggct gtggcagatc ttttggtgaa cactctgtgt  ctaccgttca ctcttaccta taccttaatg ggggagtgga aaatgggtcc gtctctgtgc  cacctggtg cctatgccc gggcctggca gtacaagtat ccacaatcac cttgacagta  attgccctg accggcacag gtgcctcgtc taccacctag agagcaagat ctccaagcga  atcagcttcc tgattattgg cttggcctgg ggcacatcag cctgctggc agtccccg  gccatcttcc gggagtattc gctgattgag atcatcccg actttgagat tgtggcctgt  actgaaaagt ggcctggcga ggagaagagc atctatggca ctgtctatag tcttcttcc  ttgttgatct tgtatgttt gccctgggc attatatcat tttcctacac tgcatttgg  agtaaatga agaaccatgt cagtcctgga gctgcaaatg accactacca tcagcgaagg  caaaaaacca ccaaatgct ggtgtgtgtg gtggtgtgt ttgcggtcag ctggctgcct  ctccatgct tccagcttgc cgttgacatt gacagccagg tctgggacct gaaggagtac  aaactcatc tcacagtgt ccacatcatc gccatgtgct ccaactttgc caatccccct  ctctatggct ggatgaacag caactacaga aaggcttcc tctcgccct ccgctgtgag  cagcgggttg atgccattca ctctgaggtg tccgtgacat tcaaggctaa aaagacctg  gaggtcagaa agaacagtgg cccaatgac tcttcacag aggtaccaa tgtctaagga  agctgtggtg tgaatatgta tggatgaatt ctgaccagag ctatgaatct ggttgatggc </p>	

Accession	Protein	Species
2201	Neuropeptide Y Receptor Type 2	Homo sapiens
3404	Neuropeptide Y Receptor Type 2	Homo sapiens

202	3405	Neuropeptide NM_005972 Y Receptor Type 4	atgaacacct ctacacctcct ggcttgctg ctcccaaat ctccacaagg tgaaaaacaga A agcaaacccc tgggcacccc atacaacttc tctgaacatt gccaggattc cgtggacgtg atggtcttca tcgtcacttc ctacagcatt gagactgtcg tgggggtcct gggtaacctc tgctgatgt gtgtgactgt gaggcagaag gaaaaagcca acgtgaccaa cctgcttacc gcaaacctgg ccttctctga cttctctatg tgcctcctct gccagccgct gaccgcccgc tacaccatca tggactactg gatctttgga gagacctctc gcaagatgtc ggccttcac cagtgcattg cggtagcgggt ctccatcctc tcgctcgtcc tcgtggccct ggagaggcat cagctcatca tcaacccaac aggtggaag ccagcatct cacaggccta cctggggatt gtgctcatct gggtcattgc ctgtgtcctc tcctgcccct tcctggccaa cagcatcctg gagaatgtct tcacaagaa ccactccaag gctctggagt tcctggcaga taagtggtgc tgtaccgagt cctggccact ggctcaccac cgcacctct acaccactt cctgctcctc ttccagtact gcctccact gggcttcac ctggtctgtt atgcacgcat ctaccggcgc ctgcagaggc aggggcgcgt gtttcacaag ggcacctaca gcttgcgagc tgggcacatg aagcaggtea atgtgtgtct ggtgtgatg gtggtggcct ttgctgtgct ctggtcgtcct ctgcatgtgt tcaacagcct ggaagactgg caccatgagg ccatcccat ctgccacggg aacctcatct tcttagtgtg ccacttgctt gccatggcct ccactgctg caaccatc atctatggct ttctcaacac caactcaag aaggagatca aggcctggt gctgacttgc cagcagagcg cccccctgga ggagtgcgag catctgcccc tgtccacagt acatacggaa gtctccaaag ggtccctgag gctaagtgc aggtccaatc ccatttaa 203	3405	Neuropeptide NP_005963.1 Y Receptor Type 4	MNTSHLLALL LPKSPQGENR SKPLGTPYNF SEHCQSDVDV MPEIVTSYSI ETVGVGLNL P CLMCVTVRQK EKANVTNLLI ANLAESDFLM CLLCQPLTAV YTIMDYWIFG ETLCKMSAFI QCMSVTVSIL SLVLVALERH QLIINPTGWK PSISQAYLGI VLIWVIACVL SLPFLANSIL ENVFKNHSK ALEFLADKV CTESWPLAHH RTIYTTFLLL FOYCLPLGFI LVCYARIYRR LQRQGRVFHK GTYSLRAGHM KQNVNVLVVM VFAFVWLWP LHVFNSLEDW HHEAIPICHG NLIFLVCHLL AMASTCVNPF IYGFINTNFK KEIKALVLTQ QQSAPLEESE HLPLSTVHTE VSKGSIRLSG RSNPI	Homo sapiens
204	3406	Neuropeptide NM_006174 Y Receptor Type 5	gaaaggctat cggtaacaaac tgacctgcca caaagttaga agaaaggatt gattcaagaa A agactataat atggatttag agctcgacga gtattataac aagacacttg ccacagagaa taatactgct gccactcgga attctgattt cccagtctgg gatgactata aaagcagtg agatgactta cagtattttc tgattgggct ctatacattt gtaagtcttc ttggctttat ggggaatcta cttattttta tggctctcat gaaaaagcgt aatcagaaga ctacgggtaaa cttctccta ggcaatctgg ccttttctga tatcttggtt gtgctgtttt gctcaccttt cacactgacg tctgtcttgc tggatcagtg gatgtttggc aaagtcatgt gccatattat gccttttctt caatgtgtgt cagttttggt ttcaacttta attttaatat caattggcat tgtcagggtat catatgataa aacatcccat atctaataat ttaacagcaa accatggcta ctttctgata gctactgtct ggacactagg ttttgccatc tgttctccc ttccagtgtt tcacagtctt gtggaacttc aaaaaacatt tgggtcagca tctgtagca gcaggatttt atgtgttgag tcatggccat ctgattcata cagaattgcc ttactatct ctttattgct agttcagtat attctgccct tagtttgtct tactgtaagt catcaagtg tctgcagaag tataagctgt ggattgtcca acaaaagaaa cagacttgaa gaaaatgaga tgatcaactt aactctcat ccattcaaaa agagtgggct tcaggtgaaa ctctctggca gccataaatg	Homo sapiens			

205	3406	Neuropeptide Y Receptor Type 5	NP_006165.1	MDLELDEYYN KTLATENNTA ATRNSDFPVW DDYKSSVDDL QYFLIGLYTF VSLLGFMGNL P LILMALMKKR NQKTTWNFLI GNLAFSDIIV VLFCSPTLT SVLLDQWMFG KVMCHIMPFL QCVSVLVSTL ILISIAIVRY HMIKHPISN LNANHYGYFLI ATVMTLGFAL CSPLPVFHSI VELQETFGSA LLSSRYLCVE SWPSDSYRIA FTISLLLVQY ILPLVCLTVS HTSVCRSISC GLSNKENRLE ENEMINLT LH PSKKSQPOVK LSGSHKWSYS FIKKHRRYS KKTACVLPAP ERPSQENHSR ILPENFGSVR SOLSSSSKFI PGVPTCFEIK PEENSVDHEL RVKRSVTRIK KRSRSVFYRL TILILVFAVS WMPLHLFHV TDFNDNLISN RHFKLVYIC HLLGMMSCCL NPILYGFLNN GIKADLVSLI HCLHM	Homo sapiens
206	3408	Neurotensin Receptor Type 1	NM_002531	tcaagctcgc cccgcgcagc ccgagccggg ctgggcgctg tctcggggg cctggggaac A cgcgcggttt ggagatcggg ggcacctgga accctggga agcccgagc cgggagacag cccgaggaac caccggttct ggagctagga gccggaagct gggagtccgg aggagagcgg agcccgagc cccgagcccg ggcggcgccg tctgggtctg gcgttcccc actggacggc gcgccgctg gtcttgcca cgcgccctcc cctgggctcg cgttcacatg tccccgctg agacgcgcc actcctgccc ggacttccag ccccgagggc gccggacaga gccgcggact ccagcgccc ccatgcgctt caacagctcc gcgccgggaa ccccgggcac gccggccgc gaccccttc agcggcgcca ggcgggactg gaggagcgc tctggggccc ggccttcggc aacgcttcgg gcaacgcgtc ggagcgcgtc ctggcggcac ccagcagcga cctggacgtg aacaccgaca tctactccaa agtgcgtggt accgccgtgt accctggcgt cctcgtggtg ggcacggtgg gcaacacgggt gacggcgttc acgctggcg ggaagaagtc cctgcagagc ctgcagagca cgttgcatat ccacctgggc agcctggcg tctccgacct gctcacccctg ctgctggcca tgcctgtgga gctgtacaac ttcacttggg tgcaccacc cttgggcttc ggcgacgcg cctgcgcggg ctactacttc ctgcgcgac cctgcacct cgcacggcc ctcaacgtgg ccagcctgag tctggagcgc tacctggcca tctgccacc cttcaaggcc aagaccctca tctcccgaa cgcacccaag aagttcatca gcgccatctg gctcgcctcg gccctgctga cgttgcttat gctgttcacc atggcgagc agaaccgcag gccgacggc cagcacgcg gcggcgtggt gtgcacccc accatccaca ctgccacct caaggtcgtc atacaggta acaccttcat gtccttcata tccccatgg tggteatctc ggtcctgaac accatcatcg ccaacaagct gaccgtcatg gtacgccagg cggccgagca gggccaagtg tgacaggtcg gggcgagca cagcacatc agcatggcca tcgagcctgg cagggtccag gccctgcggc acggcggtcg cgtccctacgt gcagtggta tcgccttctt ggtcgtctg ctgccctacc acgtgcggcg cctcatgttc tgcatactt cggatgagca gtggactccg ttcctctatg actttacca ctacttctac atggtgacca acgactctt ctacgtcagc	Homo sapiens



tccacatca acccatcct gtacaacctc gtctctgcca acttcgcca catctctctg  
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ctcctatctg tgcattacc gtaggtaggg acagtgctc atgcaccaca gacacacca

207	3408	Neurotensin Receptor Type 1	NP_002522.1	cgacacctga tctcgtatca ctacgttgccg gccaggtcat gatgtggccc cggaagctgg ccctgcgtgc catgagtgcg tcggtcatgg agtcggagc cctgagccg gccctgggtg acggcacagc cctcacagct caaacgccca ccccaactcc caccatctgc aggtggtgaa aacaaacccc gtgtatctct caataaaggt ggcgaaggc cctcatgtg g	Homo sapiens
208	3452	Opiate Receptor-Like 1 (OPRL1)	NM_000913	YSKVLVTAVY LALFVVGTVG NTVTAFTLAR KKSLSQSQST VYHILGSLAL SDLLTLLAM PVLYNFIWV HHPWAFGDAG CRGYFLRDA CTYATALNVA SLISERYLAI CHPFKAKTLM SRSRTKKFIS AIWLASALLT VPMLFTMGEQ NRSADQOHAG GLVCTPTIHT ATVKVVIQVN TFMSFIFPMV VISVLNTIIA NKLTVMVRQA AEQGVQVTVG GEHSTFSMAI EPRVQALRH GVRVLRRAVVI AFVVCWLPYH VRRLMFCYIS DEQWTFELYD FHYFYMTVN ALFYVSSSTIN PLYNLVSVAN FRHIFLATIA CLCPWRRRR KRPAFSRKAD SVSSNHTLSS NATRETTY	Homo sapiens
				cctgctctgc acctgtcgtc gactgccagc cggctgaggc cggggggtctc caggtggtc A ccagctccca aggaggttgc agaagtaccg tacagagtgg atttgacagg cagtggcatg gagccccctc tccccgcgcc gtctctggag gtatatctac gcagccacct tcagggcaac ctgtccctcc tgagccccc aa cacagtctg ctgccccgc atctgtgct caatgccagc cacggcgctc tctgccccct cgggctcaag gtcaccatcg tggggtctcta cctggcctg tgtgtcggag ggctcctggg gaactgcctt gtcattgtacg tcatcctcag gcacaccaaa atgaagacag ccaccaatat ttacatcttt aacctggccc tggccgacac tctgtgtcctg ctgacgtgc ccttcaggg caggacatc ctctgggctc tctggccgtt tgggaatgcy ctgtgcaaga cagtcatctg cattgactac tacaacatgt tcaccagcac cttcaccceta actgccatga gtgtggatcg ctatgtagcc atctgccacc ccatcctgac cctcgacgtc cgcacgtcca gcaagccca ggctgtcaat gtggccatct ggccctggc ctctgtgtgc ggtgttccc ttgccatcat gggctcggca caggtcgagg atgaagagat cgagtgcctg gtggagatcc ctacccctca ggattactgg ggcccggtgt ttgccatctg catcttccctc ttctccttca tctgtccctg gctcgtcatc tctgtctgct acagcctcat gatccggcgg ctcctgtggag tccgcctgct ctcgggctcc cgagagaagg accggaacct gcggcgcatc actcggctgg tctgtgtggt agtggctgtg ttcgtgggct gctggacgcc tgtccaggtc ttcgtgtcgg cccaagggt cgggggttcag ccagacagcg agactgcccgt ggccattctg cgcttctgca cggccctggg ctacgtcaac agctgcctca acccaccct ctacgccttc ctggatgaga actcaaggc ctgcttccgc agtttctgct gtgcatctgc cctgcccggg gacgtgcagg tctctgaccg cgtgcgcagc attgccaaagg acgtggccct ggccctgcaag acctctgaga cgttacccgc gccgcgatga ctaggcgtgg acctggcccat ggtgcctgtc agccccgaga gcccatctac gcccaacaca gagctcacac aggtcacctgc tctctaggcg gacacacctt gggccctgag catccagagc ctgggatggg cttttccctg tgggccaggg atgtctcgtc ccagaggagg acctagtac atcatgggac aggtcaaggc attagggcca cctccatggc ccagacaga ctaaaagctc cctcctgggt caggggccgag ggacacaaag gacctacctg gaagcagctg acatgctggt ggacggcct tactggagcc cgtgccctc cctccccgtg cttcatgtga ctcttgccct ctctgctgct gctgtggcag aacctgggt gggcaggcac ccggaggagg agcagcagct gtgtcatcct gtgccccca tgtgtgtgt gctgtttgca tggcagggt ccagctgctt tcagccctgt gactctcct cagggcagct ggacaggctt ggcacggccc gggaagtga gcaggcagct tttcttggg gtgggacttg	

209	3452	Opiate Receptor-Like 1 (OPRL1)	NP_000904.1	MEPLFPAPFW VCVGLLGNC ALCKTVIAD VGVPAIMGS RLRGVRLLSG LRFTALGYV KTSETVPRPA	NP_000904.1	EVYGSHLQG LVMYVILRHT YNNMTSTFT AQVEDEEIEC SREKDRNLRR NSCLNPILYA	NLSLLSPNHS KMKTATNIYI LTAMSVDRYV LVEIPTPDY ITRLVLVVA FLDENFKACF	LLPPHLLINA FNALADTLV AICHPIRALD WGPVFAICIF VFVLAQGLGV RDVQVSDRVR	SHGAFLLPLGL LLTLFPQGTD VRTSSKAQAV LFSFIVPVLV VFVLAQGLGV RDVQVSDRVR	KVTIVGLYLA ILLGFWPFGN NVAIWALASV ISVCYSLMIR QPSSETAVAI SIKDVVALAC	Homo sapiens
210	3513	Ocular Albinism 1 (Nettleship-Falls) (OAL1)	NM_000273	atgaccacgg atggcctccc gtgctgagct ttggcgctgg gcgacgtccc ggctgcctgg agcgtctcgg atgtggatcc gcttatctgg gcgtggggcc gtgtccaggt ccctgtctgc gcctctttac gtgatcaaga atcatcaatg ttgaaacctg gcccagggat cagttctcca caccatccc gggcagactt gaaattcaca	NM_000273	gggtcctggc gaccttctgc tcacgcgcgg gcttctgca cgccggcctc gtatgggtgat atatgaacca agctgttgta tgatccggag tggccaccct gtgagcgggg tgggtctcgt ttaaagggaag tcagattttt aaagcctttt tcagaactgc ttctcttgtc ggaaggagat cactgatgcc ctgacgaagc ctgcaagtga	acacccgagc tgccccacgc ggccttcac gctgtgccc ggctcgcatc ccggtccacc cacggaaatt cagtgccctgc atcggcagga gctctgtgtg cctggaccac ggcgaccccc acaaggcatt caaaatcatg attctatctt agccaagacc tttggccttc ccagtgggaa ccatgaaaa cctgcttccg cctgagcatg atcctgcaac	cgctgccgag ggagcgcagc tgggcagcgg cgcgggccc cgctgcctgc gattcccaaa tcttctgcgt ggtgagtgcg tgcttctgta tcacatcatg ctaccttcc catgtacctg gactgcagtg acgagaggag ttatttgttg gattgtcgaat cagatatcaa tbatgggaat cctgaatcca cctgggtttt cctcggtctgc tgagggggct tcaaagtgggt cagcacaatt tctcccaacc	Homo sapiens		

211	3513	Ocular Albinism 1 (Nettleship- Falls) (OAL)	NP_000264.1	catggagacc tatgaagggg atgtgtctggg ggtccagacc ceatattcct cagactcaac aattcttgtt cttagaact gtgttctcac cttccaaca ctgactgcc gaagtgtagc ggccccc aaa ccttgctctc atcaccagct agagcttctt ccgaagggc ctttaggata ggagaaaggg ttcattgcaca cactgtgag aatggaagag cccctccag accactctac agctgctcta gccttagtg cactaggaa gtttctgag gctggctgta aagtaagtgt aaggtccaca tccctggga agtagtaaa taaaatagt atgactg MTQAGRRGPG TPEPRRTQP MASPRLTGFC CPTRDAATQL VLSFQPRAFH ALCLSGGGLR P LALGLLQLLP GRPAGGSP ATSPASVRI LRAAAACDLL GCLGWVIRST VWLGFNFDV SVSDMNHTEI WPAALCVGSA MWIQLLYSAC FWLFCYADV AYLVIRRSAG LSTILLYHIM AWGLATLLCV EGAAMLYPS VSRCEGLDH AIPHYVTMYL PLLLVIVANP ILFQKTVTAV ASLLKGRQGI YTENERMGA VIKIRFFKIM LVLIICWLSN IINESLLFYL EMQTDINGGS LKPVRTAAKT TWFIMGILNP AQGFLLSLAF YGWTGCSLGF QSPRKEIQWE SLTTSAAEGA HPSPLMPHEN PASGKVSQVG GQTSDEALSM LSEGSDASTI EIHTASESCN KNEGDPALPT HGDL	Homo sapiens
212	3544	UDP-glucose Receptor (KIAA0001)	NM_014879	gaacagtgtt accttggagc ctacaatgag aggtatttca aaatgagtga agcatgactc A tcacagatga aggcctagac gcaggatctt taatggaaa acacttggc cacttcaaga cgacaaacgc tcactgggca aaacacctc actgaaaaga gacctcatat tatgcaaaaa aaatcttaag aggcctctgc cttcagaagt tacaagatga tcaattcaac ctccacacag cctccagatg aatcctgctc tcagaacctc ctgatcactc agcagatcat tcctgtgctg tactgtatgg tcttcattgc gggaatccta ctcaatggag tgcaggatg gatattctt tacgtgccc gctctaagag ttctatcatc tatctcaaga acattgttat tgcagactt gtgatgagcc tgacttttcc ttccaagatc cttggtgact caggccttgg tccctggcag ctgaacgtgt ttgtgtgcag ggtctctgcc gtgctcttct acgtcaacat gtacgtcagc attgtgttct ttgggctcat cagctttgac aggtattata aaattgtaaa gcctctttgg acttcttcca tccagtcagt gagttacagc aaacttctgt cagtgtatgt atggatgctc atgtctctcc ttgctgttcc aaatattatt ctccacaaac agagtgttag ggaggttaca caataaaaat gtatagaact gaaaagtga cttgggacgga agtggcacaa agcatcaaac tacatcttcg tggccatctt ctggattgtg ttctctttgt taatcgtttt ctatactgct atcacaaaaga aaatctttaa gtcccacctt aagtcgaagtc ggaattccac ttcgggtcaaa aagaaatcta gcccaacat attcagcatc gtgtttgtgt ttttgtctg tttgtacct taccatattg ccagaatccc ctacacaaag agtcagaccg aagctcatta cagctgccag tcaaaagaaa tcttggcgta tatgaaagaa ttcactctgc tactatctgc tgcaaatgta tgcttgacc ctattattta ttcttttcta tggcagccgt ttagggaaat cttatgtaag aaattgcaca ttcattaaa agctcagaat gacctagaca ttccagaat caaaagagga aatacaaac ttgaaagcac agatactttg tgagttccta cctcttcca aagaaagacc acgtgtgcat gttgtcatct tcaattacat aacagaaatc aataagatat gtgccctcat cataaatatc atctctagca ctgccatcca attagttca ataaaattca aatataagt tccatgcttt ttgttaacat caaagaaaac ataccatca gtaatttctc taatactgac ctttctattc tctattaata aaaaattaat acatacaatt attcaattct attatattaa aataagttaa agttataac cactagtctg gtcagttaat gtagaattt aaatagtaaa taaacacaaa cataatcaaa gaaactcac tcaggcatct tctttctcta aataccagaa	Homo sapiens

213	3544	UDP-glucose Receptor (K1AA0001)	NP_055694.1	<p> tctagtatgt aatgtttttc aacactgtcc ttaaagacta acttgaaagc aggcacagtt  tgatgaagg ctagagagct gtttgcaata aaaagtcagg ttttttccct gatttgaaga  agcaggaaaa gctgacaccc agacaatcac ttaagaaacc ccttattgat gtatttcattg  gcactgcaaa ggaagaggaa tattaattgt atacttagca agaaaatttt tttttctga  tagcactttg agtatattag atacatgcta aatatgtttt ctacaaagac ttacgtcatt  taatgagcct ggggttctgg tgtagaata tttttaagta ggctttactg agagaaacta  aatattggca tacgttatca gcaacttccc ctgttcaata gtagggaaa aataagatga  ctgggaaaaa gacacaccca caccgtagaa catatatata tctactggcg aatgggaaaag  gagaccattt tcttagaaaag caataaaact tgattttttt aaatctaaaa ttacattaa  tgagtgcata ataacacata aaatgaaaat tcacacatca ctttttctg gaaaacagac  ggattttact tctggagaca tggcatacgg ttactgactt atgagctacc aaaactaaat  tccttctctg ctattaactg gctagaagac attcatctat ttttcaaatg ttctttcaaa  acatttttat aagtaaatgtt tgtatctatt tcatgcttta ctgtctatat actaataaag  aatgtttta atactg </p>	Homo sapiens
214	3582	Oxytocin Receptor	NM_000916	<p> KNIVIADEVM SLTPPFKILG DSGLGPMQLN VFVCRVSAVL FYVMYVSIV FFGLISFDRY  YKIVKPLWTS FLOSVSYSKL LSVIVWMLML LLAVPNIILT NQSVREVTQI KCIELKSELG  RKWHKASNYI FVAIFWIVFL LLIVFYTAIT KKIFKSHLKS SRNSTSVKKK SSRNIFSIVF  VFFVCFVPYH IARIPYTKSQ TEAHYSCQSK EILRYMKEFT LLLSAANVCL DPILYFFLQ  PFREILCKKL HPLKAQNDL DISRIKRGNT TLESTDTL </p>	Homo sapiens
				<p> tgtaaaggct ctgggaccaa cgtggggcga accagctccg ctccggagggt gtctgcgagg A  ctggcctcgc ccgcccccta cgggaccctg cgcatagtgc agcctcagcc ccaggacag  cgccgcctcc agacgcctgc cgcgcgcga cctggggagg cgtcctcgc tgcctcctg  taccatcca cgcaccagcc agctgcggc gaggggattc caaccgaggc tccagtgaaga  gacctcagct tagcatcaca ttagtgcag ccggcaggcc atcccaactc ggcgcggagg  cgacgcgtc actggggccc tcaatgcggc tgcaacttc ccggggggag tcaactttag  gttcgcctgc ggaactcggg cagtgaagc cgtgaacat ccgagggaac tggcacgctg  gggctctgg gcttctggcc gtagaggat tcccgtcat ttgcagtggc tcagaggagg  gtggacccag cagatccgtc cgtggagtct ccaggagtgg agccccggc gccctacac  cctccgacac gccggtatccg gccagcccgc ccaagccgt aaagggtcgc aggcgcggg  cgacccgctg ccgccagggt catggagggc cgcctgcag ccaactggag gcgcaggca  gccaacgcca gcgcgcgc ccgcccggcc gagggcaacc gcaccgccc acccccgccg  cgcaacgagg ccctggcgcg cgtggagggt cgtgtgctgt gtctcatcct gctcctggcg  ctgagcggga acgctgtgt gctgctggcg ctgcgacca caccagaa gcaactcgcc  ctctcttct tcatgaagca cctaaagcat gccgacctgg tggtagcagt gtttcagggtg  ctgcgcaggt tgctgtggga catcacttc cgttctacg ggcccagcct gctgtccgc  ctggtcaagt acttcaggt ggtgggcatg ttcgcctcca cctacctgct gctgctcatg  tccctggacc gctgcctggc catctgccag ccgtgcgct cgtgcgccc ccgcacgac  cgctggcag tgctgcac gtggctcggc tgctgtggc ccagcgcc gcaggtgcac  atcttctctc tgcgcagggt ggctgacggc gtcttgact gctggccgt ctctacag  ccctggggac ccaaggccta catcatatg atcacgtag ctgtctatat cgtgcgggtc </p>	

atcgtgctcg ctacctgcta cggccttata agcttcaaga tctggcagaa cttgcggctc  
aagaccgctg cagcggcggc ggccgagggc ccagagggcg cggcggctgg cgatgggggg  
cgcgtggccc tggcggctgt cagcagcgtc aagctcatct ccaaggccaa gatccgcacg  
gtcaagatga ctttcatcat cgtgctggcc ttcatcgtgt gctggacgcc ttctttcttc  
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catttgggaa agaaaaagaa ataaatgtat ccagatagga aaagaagaag taaaactatt  
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cacacacga cacagctatt agaactaata agcaagttcc gcaaggtttc agatacaag  
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gttaataaat tccatttata ataccatcag aaagaataaa ataggaatca acttaacaaa  
acaagtgcga gactgaaaac tacaaaattg gaaagaaatt aaagaaggct taaataaatg  
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aatcagctca gtgtgttact ggtttaagga tagacatag ggcagaata aagagtacag  
atatgaacac ttatacttac ggtcaattga ttttgcaa ggttcccaag caattcatt  
agagaaagga ggtcttttc aacaaatggc accgagacaa tgatatgcaa gtgcaaaaga  
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taaatataag agctgaaact ataaaactt agaaagaaac ataggcatag atctttgtaa  
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tggctactaa gcacatgaaa aatactcaac attattattc attagggaaa tgcaagtcaa  
aatcacaatg agattccagt ttacaatcac taggatggct acaataaaaa gatggacaag



217	3589	Purinerigic Receptor P2Y <sub>1</sub> , G- protein coupled, 2 (P2RY2)	NP_002555.1	agcagaacac ttacgcctgt gcaggtttat attggaagc tgtagaggac caggacttgt gcagacgcca cagtcctccc agatattggac catcagtgac tcactgtgga tgaccccatg ctccgtcatt tgacaggggc tcaggatatt cactctgtgg tccagagtca actgttccca taacccttag tcatcgtttg tgtgtataag ttgggggaat taagtttcaa gaaaggcaag agctcaaggt caatgacacc cctggcctga ctcccatgca agtagctggc tgtactgcca aggtacctag gttggagtc agcctaataca agtcaaatgg agaaacaggc ccagagagga aggtggctta ccaagatcac ataccagagt ctggagctga gctacctggg gtgggggcca agtcacaggt tggccagaaa accctggtaa gtaataggag ctgagtttgc acagtggctt ggaatggact gggcgccacg gtggacttag ctctgaggag taccctccagc ccaagagatg aacatctggg gactaatatc atagacccat ctggaggctc ccatgggcta ggagcagtgt gaggctgtaa cttatactaa agttgtgtt gcctgctaaa aaaa MAADLGPWND TINGTWGDE LGYRCRFNED FKYVLLPVSY GWCVLGLCL NAVALYIFLC P RLKTNWASTT YMFHLAVSDA LYAASLPLLV YYYARGDHPV FSTVLCKLVR FLFTNLYCS ILFLTICISVH RCLGVLRLR SLRWGRARYA RRVAGAVWVL VIACQAPVLY FVTTSGRGR VTCHDTSAPL LFSRFVAYSS VMLGLLFAVP FAVILVCYVL MARRLLKPAY GTSGGLPRAK RKSVRTIAVV LAVFALCFLP FHVTRTLYS FRSLDLSCHT LNAINMAYKV TRPLASANSC LDPVLYFLAG QRLVRFARDA KPPTGPSPAT PARRRLGLRR SDRTDMQRIG DVLGSEDFR RTESTPAGSE NTKDIRL	Homo sapiens
218	3595	Purinerigic Receptor P2Y <sub>1</sub>	NM_002563	ccccctccc cggggatcca gttgcctgc tccctccgc tcgctggctt ttcgatgct A tgctgcgcc ctggccgcc ctgcctctc gccgcctct accctcggg gccgcgcct aagtcgagga ggagagaatg accgaggtgc tgtggccggc tgtcccaac gggacgggacg ctgccttctt ggcgggtccg ggttcgtctt gggggaacag cacggtcgcc tccactgccc ccgtctctc gtctttcaa tgcgccttga ccaagacggg ctccagttt tactacctgc cggctgtcta catcttggta ttcactatcg gcttctcggg caacagcgtg gccatctgga tgttcgtctt ccacatgaag cctgggagcg gcactcctg gtacatgttc aatttggctc tgcccgact ctgtgacgtg ctgactctgc cagccctgat ctctactac tcaataaaaa cagactggat cttcggggat gccatgtgta aactgcagag gttcatcttt catgtgaacc tctatggcag catcttgttt ctgacatgca tcagtgccea ccggtacagc ggttgggtgt acccctcaa gtccctgggc cggctcaaaa agaagaatgc gatctgtatc agcgtgctgg tgtggctcat tgtgtgtgtg gcgatctccc ccactctctt ctactcaggt accgggtccc gcaaaaaaaa aaccatcac tgttacgaca ccacctcaga cgagtacctg cgaagtattt tcatctacag catgtgcag accgtggcca tgttctgtgt ccccttgggt ctgattctgg gctgttacgg attaatgtg agagctttga ttacaaaaa tctggacaac tctcctctga ggagaaaaac gattacctg gtaatcattg tactgactgt ttttgcgtg tcttacctc ctttccatgt gatgaaaacg atgaacttga gggcccggtt tgattttcag accccagcaa tgtgtgcttt caatgacagg gtttatgcca cgtatcaggt gacaagaggt ctageaagtc tcaacagttg tgtggacccc attctctatt tcttggcggg agatactttc agaaggagac tctcccagc cacaaggaaa gcttctagaa gaagtggagg aaatttgcaa tccaagagt aagacatgac cctcaatatt ttacttgagt tcaagcagaa tggagatata agcctgtgaa ggcacaagaa tctccaaa cctctctgtt gtaatatggt aggatgctta acagaatcaa gtacttttcc cctctttaac tttctagttt agaaaaaaat caaccaaga aaatagtgag	Homo sapiens



219	3595	Purinerigic Receptor P2Y1	NP_002554.1	MTEVLWPAVP NGTDAFLAG PGSSWGNSTV ASTAAVSSSF KCALTKTGFQ FYLPAVYIL P VFIIIGFLGNS VAIWMFVFM KPWGSI SVYM FNLAADFLY VLTLPALIFY YFNKTDWIFG DAMCKLQRFI FHNLYGSIL FLTCISAHRY SGVYPLKSL GRLLKKNAIC ISVLVWLIVV VAISPILFYS GTGVRKNKTI TCYDPTSDEY LRSYFIYSMC TTVAMFCVPL VLILGCYGLI VRALIYKDLD NSPLRRKSIY LVIIVLTVFA VSYIPFHV MK TMNLRLARLDF QTPAMCAFN D RVYATYQVTR GLASLNSCVD PLYFLAGDT FRRRLSRATR KASRRSEANL QKSSEDWTLN ILPEFKQNGD TSL	Homo sapiens
220	3596	Purinerigic Receptor P2Y5	NM_005767	ctgatgaaag tgcttccaaa ctgaaaaattg gacgtgcctt tacgatggta agcgttaaca A gctcccaatg cttctataat gactccttta agtacacttt gtatgggtgc atgttcagca tggtgtttgt gcttgggtta gtatccaaatt gtgttgccat atacattttc atctgcgtcc tcaaaagtccg aaatgaaact acaacttaca tgatccaaatt ggcaatgtca gacttgcttt ttgtttttac ttacccttc aggatTTTTT acttcacaaac acggaattgg ccatttggag atttactttg taagatttct gtgatgctgt ttatatccaa catgtacgga agcattctgt tcttaacctg tattagtgtg gatcgatttc tggcaattgt ctaccatttt aagtcaaaaga ctctaagaac caaaagaaat gcaaagattg ttbgactgg cgtgtggtta actgtgatcg gaggaagtgc accgcgctt ttgtttcagt ctaccactc tcagggtaac aatgcctcag aagcctgctt tgaaaaatttt ccagaagcca catggaaaac atatctctca aggattgtaa ttttcatcga aatagtggga ttttttattc ctctaatttt aaatgtaact tgttctagta tggtgctaaa aactttaacc aaaccagtta cattaagtag aagcaaaaaa acaaaaacta aggtttttaaa aatgattttt gtacatttga tcatattctg tttctgtttt gtcccttaca atatcaatct tattttatat tctcttgtga gaacacaaac atttgttaat tgctcagtag tggcagcagt aaggacaatg tacccaatca ctctctgtat tgctgtttcc aactgttgtt ttgacctat agtttactac ttacatcgg acacaattca gaattcaata aaaaatgaaa	Homo sapiens

221	3596	Puriner Receptor P2Y5	NP_005758.1	actggtctgt caggagaagt gacttcagat tctctgaagt tcatggtgca gagaatttta ttcagcataa cctacagacc ttaaaaagta agatatattga caatgaatct gctgcctgaa ataaaacct taggactcac tgggacagaa ctttcaag MSDLLFVFTL YNDSFKYTL GCMFNMVFL GLVSNCAIY IFICVLKVRN ETTTMINLA P PFKSKTLRTK RNAKIVCTGV WLTVIGGSAP AVFVQSTHSQ GNNASEACFE NFPEATWKTY LSRIVIFIEI VGFPIPLIN VTCSSMVLKT LTKPVLRS KINKTKVLKM IFVHLIIFCF CFVPYNINLI LYSILVRTQF VNCSVVAAR TMYPTILCIA VSNCCFDPIV YYFTSDTIQN SIKMNWSVR RSDFRFSEVH GAENFIQHL QTLKSKIFDN ESAA aaggacagag gaggggccc tctgtcagc tggctggag cagaggtggc tttgtctttt A cggaagaact ggttctgtg aatttgct tatttccat caagatcaa ggacctgctc tggggctacc tcaggggccc acaggatgag gggctgggtt tcagatgagt tttctgctg cctgtcatct ggatagtgct taaaaattg caaactgcct tctgtcagt gtcttgctca ttcttcata cactcctgat atgtctctca gtttctcat ctgtgcctc tccagacttc tgccagaaca ttgcacgca cagtttcagg cacagaactg actggcagca ggggctgctc cacgagtggt aatttgctc agcacttcac ggactgcaag cgaggcactt gtaactctt ggataaaca agccttgcca gaagaacct atgttgga ggctgagttc aggtgagga gatgggtggt gtcctcagt agcccctgct tccctgaaca taggaaccc acctgggcag ccatggaatg ggacaatggc acaggccagg ctctgggtt gccacccacc acctgtgtct accgcgagaa cttaagcaa ctgctgtgct cactctgta ttggcggtg ctggcggtg gcctgcccgt gaacatctgt gtcattacc agatctgca gtcgcgcgg gcctgaccc gcacggccgt gtacacctta aacctgtc ttgctgacct gtatatgccc tgcctccctg ccctgtcat ctacaactat gcccaagtg atcactggcc ctgtggcgac ttgcctgccc gcctggtccg ctctctcttc tatgccaacc tgcacggcag catctcttc ctacactgca tcagcttcca gcgtacctg ggcactgccc acccgctggc cccctggcac aacgtgggg gccgcccggc tgcctggcta gtgtgtgtag ccgtgtggct ggcgtgaca acccagtgc tgccacagc catcttctgt gccacaggca tccagcgtaa ccgactgtc tgctatgacc tcagcccgc tgcctggcc accactata tgcctatgg catggctctc actgtcatcg gcttctgt gcttctgt gcttctgt gcttctgt gcttctgt tctctggcc tgcgcctgt gccgcccagg tggcccggca gagcctgtgg cccaggagcg gcgtggcaag gcggcccga tggccgtggt ggtggctgt gcttggca tgcgttctc gcttctc atcacaaga cagcctacct ggcagtgcgc tcgacgcgg gcgtcccctg cactgtattg gaggccttg cagcggccta caaaggcac cgccgtttg ccagtgcga caggtgtgtg gacccatcc tcttctact caccagaag aagttccgc ggcgaccaca tgagctcta cagaaactca cagccaaatg gcagagcag ggtcgtgag tctccaggt cctgggcagc ctcatattt gccatttgtt ccggggcacc aggagcccca ccaacccca accatgcgga gaattagat tcagctcagc tgggcatgga gtaagatcc ctacaggac ccagaagctc accaaaaact atttcttcag ccttctctt ggcccagacc ctgtgggcat ggagatggac agacctggg ctggctcttg agaggtccca gtcagccatg gagactggg gaaaccacat taagtgctc acaaaaatac agtgacgt gtactgtcaa aa	Homo sapiens
222	3597	Puriner Receptor P2Y6	NM_004154	aaggacagag gagggccc tctgtcagc tggctggag cagaggtggc tttgtctttt A cggaagaact ggttctgtg aatttgct tatttccat caagatcaa ggacctgctc tggggctacc tcaggggccc acaggatgag gggctgggtt tcagatgagt tttctgctg cctgtcatct ggatagtgct taaaaattg caaactgcct tctgtcagt gtcttgctca ttcttcata cactcctgat atgtctctca gtttctcat ctgtgcctc tccagacttc tgccagaaca ttgcacgca cagtttcagg cacagaactg actggcagca ggggctgctc cacgagtggt aatttgctc agcacttcac ggactgcaag cgaggcactt gtaactctt ggataaaca agccttgcca gaagaacct atgttgga ggctgagttc aggtgagga gatgggtggt gtcctcagt agcccctgct tccctgaaca taggaaccc acctgggcag ccatggaatg ggacaatggc acaggccagg ctctgggtt gccacccacc acctgtgtct accgcgagaa cttaagcaa ctgctgtgct cactctgta ttggcggtg ctggcggtg gcctgcccgt gaacatctgt gtcattacc agatctgca gtcgcgcgg gcctgaccc gcacggccgt gtacacctta aacctgtc ttgctgacct gtatatgccc tgcctccctg ccctgtcat ctacaactat gcccaagtg atcactggcc ctgtggcgac ttgcctgccc gcctggtccg ctctctcttc tatgccaacc tgcacggcag catctcttc ctacactgca tcagcttcca gcgtacctg ggcactgccc acccgctggc cccctggcac aacgtgggg gccgcccggc tgcctggcta gtgtgtgtag ccgtgtggct ggcgtgaca acccagtgc tgccacagc catcttctgt gccacaggca tccagcgtaa ccgactgtc tgctatgacc tcagcccgc tgcctggcc accactata tgcctatgg catggctctc actgtcatcg gcttctgt gcttctgt gcttctgt gcttctgt gcttctgt tctctggcc tgcgcctgt gccgcccagg tggcccggca gagcctgtgg cccaggagcg gcgtggcaag gcggcccga tggccgtggt ggtggctgt gcttggca tgcgttctc gcttctc atcacaaga cagcctacct ggcagtgcgc tcgacgcgg gcgtcccctg cactgtattg gaggccttg cagcggccta caaaggcac cgccgtttg ccagtgcga caggtgtgtg gacccatcc tcttctact caccagaag aagttccgc ggcgaccaca tgagctcta cagaaactca cagccaaatg gcagagcag ggtcgtgag tctccaggt cctgggcagc ctcatattt gccatttgtt ccggggcacc aggagcccca ccaacccca accatgcgga gaattagat tcagctcagc tgggcatgga gtaagatcc ctacaggac ccagaagctc accaaaaact atttcttcag ccttctctt ggcccagacc ctgtgggcat ggagatggac agacctggg ctggctcttg agaggtccca gtcagccatg gagactggg gaaaccacat taagtgctc	Homo sapiens

223	3597	Purinergic Receptor P2Y6	NP_004145.1	MEWDNGTGQA LGLPPTTCVY RENFKQLLLP PVYSAVLAAG LPLNICVITQ ICTSRRALTR P	Homo sapiens
				TAVYTLNLAL ADLLYACSLP LLIYNYAQGD HWPEGDFACR LVRFLEYANL HGSILFELTCI SFQRYLGICH PLAPWHKRG RRAAWLVCVA VWLAVTTQCL PTAIFAATGI QNRNRTVCYDL SPPALATHYM PYGMALTVIG FLFPFAALLA CYCLLACRLC RQDGPAPPEVA QERRGKAARM AVVVAFAAI SFLPFHITKT AYLAVRSTPG VPCTVLEAFA AAYKGTTRPFA SANSVLDPIL FYFTQKKFRR RPHELLQKLT AKWQRQGR	
224	3599	G Protein- Coupled Receptor 23 (GPR23)	NM_005296	cctaccggtc catagtgtca gagtgggtgaa cccctgcagc cagcaggcct cctgaaaaaa A aagtcacatgg gtacagagaag attcattgac ttcccaattcc aagattcaaa ttcaagccctc agacccagggt tgggcaatgc tactgccaat aatacttgca ttgtttgatga ttccttcaag tataatctca atggtgctgt ctacagtggt gtattcatct tgggtctgat aaccaacagt gtctctctgt ttgtctcttg ttccgcatg aaaaatgagaa gtgagactgc tatttttacc accaatctag ctgtctctga ttgtcttttt gtctgtacac taccttttaa aatattttac aacttcaacc gccactggcc ttgtggtgac accctctgca agatctctgg aactgcattc cttaccaca tctatgggag catgctcttt ctacactgta ttagtgtgga tcgtttcctg gccattgtct atccttttctg atctcgtact attaggacta ggaggaaattc tgccattgtg tgtgctgggt tctggatcct agtcctcagt gggggtattt cagcctcttt gtttccacc actaatgtca acaatgcaac caccacctgc ttggaaggct tctccaaacg tgtctggaag acttatttat ccaagatcac aatatttatt gaagtgtgtg ggtttatcat tctcttaata ttgaatgtct ctgtctcttc tgtgtgtgtg agaactcttc gcaagcctgc tactctgtct caaatggga ccaataagaa aaaagtactg aaatgatca cagtacatat ggcagtcttt gtggtatgct ttgtacccta caactctgtc ctctcttgtt atgcctcgtt gcgctcccaa gctattacta attgcttttt gaaaagattt gcaaaagatca tgtaccctaat caccttgtgc cttgcaactc tgaactgttg ttgtgacct ttcatctatt acttaccct tgaatccttt cagaagtctt tctacatcaa tgcccacatc agaattggagt cctgttttaa gactgaaaca cctttgacca caaagccttc ccttccagct attcaagagg aagtgagtga tcaaaacaaca aataatgggt gtgaattaat gctagaatcc acccttttagg tatgagaaat gtgttcagggt ccagatatgg ttctccttat aatttttct atgtataaa ctaaaagattt gaagctaatg atactgagaa taatgcacca aatccagtca gatacatttg ttggaaggta tactgtagag tttttattgc tgttttcttc agtaattata ggtcaaatct aattacaaca accaagatgg attgccaac tcttctgctt ggttggaaat tcatgtatc gcattatcca ggtggctagt ggcatttgat aatatagaga tgactttgaa actttcaaaa aggtatttct attocaaatga tatttggtaa ttaggttggg cctataaata tagaacaat tcagggattt ttaaaaaatt gtgttactac tgatatatgc tagttttatt ttattttttt ggactgtcat tgagtttatt ttagcacaag aatattttta gcctaaccatt attaataaga aatgtgtcaa atttttaaca ttggtaaaaat atgttatgtg cattttgaa acagaaaaa aatgctgtt gcatgtacgt gggtgggaag aaaaagaaa ttaacaggat ttacacaatt ataatacca gcagtgtgag tttaaaaaac ttcgtttgtt ttacaccaa ttaaaatttt catgtcaaac ttcaagcca gaaagctgct aaatacgtgt ctggcaggta aaagctggaa aattacttaa aacaggaaaa tgtcaataaa aaaacttgag caacaccaac atattttttc ttaaaatgtc acgttatctt cattttggga aactaggttc tataaaatat ttatcctccc tgttatactt tggagcacag cacagccaga aaggggctgc atttgtgccc aggtcaggag caaattgaaa aaaaaataa	Homo sapiens



227	3638	Parathyroid Hormone Receptor 2 (PTH2)	NP_005039.1	MAGLGASLHV	WGWLMLGSL	LARAQLDSG	TITIEQIVL	VLKAKVQCEL	NITAQLQEGE	P	Homo sapiens
				GNCFPEWDGL	ICWPRGTGK	ISAVPCPPY	YDFNHKGVA	RHCNPNGTWD	FMHSLNKTWA		
				NYSDDLRLQ	PDISIGKQEF	FERLYVMYTV	GYSISFGSLA	VAILIIGYFR	RLHCTRNYIH		
				MHLFVSEMLR	ATSIFVKDRV	VHAHIGVKEL	ESLIMQDDPQ	NSIEATSVDK	SQYIGCKIAV		
				VMFIYFLATN	YYWILVEGLY	LHNLIFFVAFF	SDTKYLMGFI	LIGWGFPAF	LAWAVARAT		
				LADARCWELS	AGDIKWIYQA	PILAAIGLNF	ILFLNTVRVL	ADKIWETNAV	GHDRKQYRK		
				LAKSTLVLLV	VFGVHYIVFV	CLPHSFTGLG	WEIRMHCELF	FNSFQGFVVS	IIYCYCNCEV		
				QAEVKKMWSR	WNLSVDWKRT	PPGSRRCGS	VLTTVTHSTS	SQSQVAASTR	MVLISGKAAK		
				IASRQPDISH	TLPGYVWSNS	EQDCLPHSFH	EETKEDSGRQ	GDDILMEKPS	RPMESNPDTE		
				GCQGETEDVL							
228	3640	Parathyroid Hormone Receptor 1 (PTH1)	NM_000316	cggaggagacg	cggccctagg	cgggtggcgt	ggggaccgcc	cggatcgcac	cggcctggc	A	Homo sapiens
				gctcctgctc	tgctgccccg	tgctcagctc	cgcgtacgcg	ctggtggatg	cagatgacgt		
				catgactaaa	gaggaacaga	tcttctgct	gcaccgtgct	caggcccatg	gcgaaaaacg		
				gctcaaggag	gtcctgcaga	ggccagccag	cataatggaa	tcagacaagg	gatggacatc		
				tgctgccaca	tcagggaagc	ccaggaaaga	taaggcatct	gggaagctct	accctgagtc		
				tgaggaggac	aaggaggcac	ccactggcag	caggtaccga	gggcgcccc	gtctgcccga		
				atgggaccac	atcctgtgct	ggccgtggg	ggcaccaggt	gaggtggtg	ctgtgcccgt		
				tccggactac	atttatgact	tcaatcaca	aggccatgcc	taccgacgt	gtgaccgcaa		
				tggcagctgg	gagctggtgc	ctgggcacaa	caggacgtgg	gccaaactaca	gcgagtgtgt		
				caaatctctc	accaatgaga	ctcgtgaacg	ggaggtgttt	gaccgcctgg	gcatgattta		
				caccgtgggc	tactccgtgt	ccctggcgct	cctcaccgta	gctgtgctca	tcctggccta		
				ctttaggcgg	ctgcactgca	cgcgcaacta	catccacatg	cacctgttcc	tgctctcat		
				gctgcgcgcc	gtgagcatct	tcgtcaagga	cgctgtgctc	tactctggcg	ccacgcttga		
				tgaggctgag	cgcctcaccg	aggaggagct	gcgcgccatc	gccaggcgcc	ccccgcgcc		
				tgccaccgcc	gctgccggct	acgcgggctg	cagggtggct	gtgaccttct	tccttacttt		
				cctggccacc	aactactact	ggattctgggt	ggagggggctg	tacctgcaca	gcctcatctt		

229	3640	Parathyroid Hormone Receptor 1 (PTHr1)	NP_000307.1	<p>catggccttc ttctcagaga agaagtacct gtggggcttc acagtcttcg gctggggtct</p> <p>gcccgtgtc ttctgtgctg tgtgggtcag tgtcagagct accctggcca acaccgggtg</p> <p>ctgggacttg agtcctggga acaaaaagtg gatcatccag gtgcccattc tggcctccat</p> <p>tgtgtcaac tcatctctct tcatcaatat cgtccgggtg ctgcccacca agctgcggga</p> <p>gaccaacgcc ggcgggtgtg acacacgga gcagtaccgg aagctgtctc aatccacgct</p> <p>ggtgtcatg cccctctttg gcgtccacta cattgtcttc atggccacac catacacga</p> <p>ggtctcagg agctctggc aagtcagat gcactatgag atgtcttca actccttcca</p> <p>gggatttttt gtgcgaatca tatactgtt ctgcaatggc gaggtacaag ctgagatcaa</p> <p>gaaatcttgg agcgtctgga cactggcact ggacttcaag cgaaggcac gcagcgggag</p> <p>cagcagctat agctacggcc ccattgtgtc ccacacaagt gtgaccaatg tcggccccc</p> <p>tgtgggactc ggcctgcccc tcagccccc cctactgcc actgccacca ccaacggcca</p> <p>ccctcagctg cctggccatg ccaagccagg gacccagcc ctggagacc tcgagaccac</p> <p>accacctgcc atggctgtc ccaaggacga tgggttctc aacggctcct gctcaggcct</p> <p>ggacgaggag gcctctggc ctgagcggc acctgccctg ctacaggaag agtgggagac</p> <p>agtcattgta ccaggcgtg ggggctggc ctgctgacat agtgatgga cagatggacc</p> <p>aaaaagatgg tgggtgaatg attccact cagggcctgg ggccaagag aaaaacagg</p> <p>aaaaaaga aaaaaaaga aaagga</p>	Homo sapiens
230	3732	PACAP Receptor Type 1	NM_001118	<p>gtpaletlet tppamaapkd dgflngscsg ldeasgper ppallqeewe tvn</p> <p>agccacagaga cacattggg ctgacctgcc gctgctgtca gtggaggcc agtgggtctg A</p> <p>gccaagaagt gtcattggctg gtgctgtgca cgtttccctg gctgtcact gcggggcctg</p> <p>tccgtggggc cggggcagac tccgcaagg acgcgcagcc tgaagtccg cggcccagag</p> <p>acacattgg gctgacctgc cgtgctgtc agtggaggc cagtgggtgt ggccaagaag</p> <p>tgtcatggct ggtgtcgtg acgtttccct ggtgctctc ctctgctgc ctatggcccc</p> <p>tgccatgcat tctgactgca tcttcaagaa ggagcaagcc atgtgcctgg agaagatcca</p> <p>gaggggcaat gagctgatgg gcttcaatga tctcttcca ggctgtcctg ggatgtggga</p> <p>caacatcacg tgttgaagc ccgcccatgt ggttgatgag gctgtgtca gctgcccctga</p> <p>gctcttccga atcttcaacc cagaccaagt ctgggagacc gaaacattg gagagtctga</p> <p>ttttggtgac agtaactcct tagatctctc agacatgga gtggtgagcc ggaactgcac</p> <p>ggaggatggc tggtcggaac ccttccctca ttactttgat gctgtgggt ttgatgaata</p> <p>tgaatctgag actggggacc aggattatta ctacctgtca gtgaaggccc tctacacggt</p> <p>tggctacagc acatccctcg tcacctcac cactgccatg gtatcccttt gtgccttcg</p> <p>gaagctgcac tgcacacgca acttcatcca catgaacctg ttgtgtcgt tcatgtgag</p>	Homo sapiens

231	3844	PACAP Receptor Type 1	NP_001109.1	<p>           ggcgatctcc gttctcatca aagactggat tctgtatgag gagcaggaca gcaaccactg            cttcatctcc actgtggaat gtaaggccgt catggttttc ttccactact gtgtgtgtgc            caactacttc tggctgttca tggaggccct gtacctcttc actctgctgg tggagacctt            cttccctgaa agagataact tctactgga caccatcatt ggctggggga ccccaactgt            gtgtgtgaca gtgtgggcta cgtgagact ctactttgat gacacaggct gctgggatat            gaatgacagc acagctctgt ggtgggtgat caaaggccct gtggttggct ctatcatggg            taactttgtg ctttttattg gcattatcgt catccttctg cagaaacttc agtctccaga            catgggaggg aatgagtcca gcatctactt ggcactggcc cggctccacc tgcgtctcat            cccactattc ggaatccact acacagtatt tgccttctcc ccagagaaatg tcagcaaaaag            gaaaagactc gtgtttgagc tggggctggg ctccttccag ggctttgtgg tggctgttct            ctactgtttt ctgaatgggt aggtacaaag ggagatcaag cgaaaatggc gaagctggaa            ggtgaaccgt tacttcgctg tggacttcaa gcaccgacac ccgtctctgg ccagcagtgg            ggtgaatggg ggcacccagc tctccatcct gagcaagagc agtcccaaa tccgcattgtc            tggcctccct gctgacaatc tggccacctg agccatgctc ccct         </p>	Homo sapiens
232	3844	Apelin Receptor	NM_005161	<p>           VHVSLAALL LLPMAPMHS DCFKKEQAM CLEKIQRANE LMGFNDSSPG CPGMWDNITC            WKPAHVGMV LVSCPELFRI FNPQWETE TIGESDFGDS NSLDLSDMGV VSRNCTEDGW            SEFPFHYFDA CGFDEYSEI GDQYYILSV KALYTVGYST SILVTLTTAMV ILCRFRKLHC            TRNFIHMLNF VSFMLRAISV FIKDWILYAE QDSNHCFIST VECKAMVFF HYCVVSNYFW            LFIEGLYLFT LLVETFFPER RYFYWTIIG WGTPTVCVTV WATRLRYLRLR STLLPLPLFG            ALWVVIKGPV VGSIMVNFV FIGIIVILVQ KLQSPDMGNG ESSIYLRRLR STLLPLPLFG            IHYTVFAFSP ENVSKRERLV FELGLSFQG FVAVLYCFL NGEVQAEIKR KWRSWKVNRV            FAVDFKRRHP SLASSGVNGG TQLSILSKSS SQIRMSGDPA DNLAT         </p>	Homo sapiens
233	3844	Apelin Receptor	NM_005161	<p>           atggaggaag gtggtgattt tgacaactac tatggggcag acaaccagtc tgaagtgtgag A            tacacagact ggaatctctc gggggccctc atccctgcca tctacatgtt ggtcttctc            ctgggcacca cgggaaacgg tctggtgctc tggaccgtgt ttcggagcag ccggagagaag            aggcgtctcag ctgatatctt cattgctagc ctggcgggtg ctgacctgac ctctgtggtg            acgctgcccc tgtgggctac ctacacgtac cgggactatg actggccctt tgggaccttc            ttctgcaagc tcagcagcta cctcatcttc gtcaacatgt acgccagcgt ctctgcctc            accggcctca gcttcgaccg ctacctggcc atcgtgaggc cagtggccaa tgcctggctg            aggcctgggg tcagcggggc cgtggccacg gcagttcttt ggggtctggc cgcctcctg            gccatgcctg tcatggtgtt agcaccacc ggggacttgg agaaccacc taaggtgcag            tgcatactgg actactccat ggtggccact gtgagctcag agtgggctg ggaagtgggc            cttgggggtct cgtccaccac cgtgggcttt gtggtgacct taccatcat gctgacctgt            tacttcttca tcgcccnaac catcgtggc cacttccgca aggaacgcat cgagggctg            cggaagcggc gccggctgct cagcatcatc gtggtgctgg tggtagacct tgcctgtgctg            tggatgccct accacctggt gaagacgtg tacatgctgg gcagcctgct gactggccc            tgtgactttg acctcttct catgaacatc ttccctact gcacctgcat cagctacgtc            aacagctgoc tcaacccctt cctctatgcc tttttcgacc cccgcttccg ccaggcctgc            acctccatgc tctgctgtgg ccagagcagg tgcgcaggca cctccacag cagcagtggg            gagaagtcaag ccagctactc ttcggggcac agccaggggc ccggcccaaa catgggcaag         </p>	Homo sapiens

233	3844	Apelin Receptor	NP_005152.1	ggtggagaac agatgcacga gaaatccatc ccctacagcc aggagaccct tgtggttgac tag	MEEGGDFDNY YGADNQSECE YTDWKSSGAL IPAIYMLVFL LGTTGNGLVL WTVFRSSREK P RRSADIFIAS LAVADLTFV TLPLWATYTY RDYDWPFGTF FCKLSSYLIF VNMVASVFCL TGLSFDRYLA IVRPVANARL RLRVSGAVAT AVLWVLAALL AMPVMVLRRTT GDLENTTKVQ CYMDYSMVAT VSSEWAVEVG LGVSSTTVGF VVFTIMLTC YFFIAQTIAG HFRKERIEGL RKRRRLSII VVIVVTFALC WMPYHLVKTL YMLGSLHWP CDFDLFLMNI FPYCTCISYV NSCLNPFLLA FFDPRFRQAC TSMLCCGQSR CAGTSHSSSG EKSASYSSGH SQGPGPNMGK GGEQMHEKSI PYSQETLVD	Homo sapiens
234	3845	Chemokine- Like Receptor 1 (CMKLR1)	NM_004072	gaattcggca cgagtcaggg aagcagcccc ggcggccagc agggagctca ggacagagca A ggctccctgg gaagcctccg ggtgataggg gtgttccagc tgcggcgctc tgggggttca gagggggatc ttgaatgaac aaatgaatga actgctttct gggcaaacag ccacagccag aggagcctgt gattggcaga aagaagccag ggtgtgcaag tctccccaac agcctcgagt ggcctgcagt cacagggaac cctcaggaag accttccggg cagagaccag agggaagccc atctctccag cagaactgct tggatttttc taccaggagg ctccaggctc tgcaacaatg atagcagaag ctgatggcat ctagagatct aggtctgggac tagcacagca tcaactctac cactttctgt tggtcacagc aactcaccat gccagtgagc attcaagggg aggagaaata gagtcacatt ctgtatggga ggcgtgacat agaatggagg atgaagatta caacacttcc atcagttacg gtgatgaata cctgattat ttagactcca ttgtggtttt ggaggactta tcccccttgg aagccagggt gaccaggatc ttctgtgtgg tggctacag catcgtctgc ttcctcggga ttctgggcaa tggcttgggtg atcatctatg ccacttcaa gatgaagaag acagtgaaca tggctctggtt cctcaacctg gcagtggcag atttcctgtt caacgtcttc ctcccaatcc atatacacta tgcgacctg gactaccat gggttttcgg gacagccatg tgcaagatca gcaacttctt tctcatccac aacatgttca ccagcgtctt cctgctgacc atcatcagct ctgaccgctg catctctgtg ctctccctg tctggtccca gaaccaccgc agcgttcgcc tggcttacat ggcctgcatg gtcacttggg tcttggtctt cttcttgagt tccccatctc tegtcttccg ggacacagcc aacctgcatg gaaaaatata ctgcttcaac aacttcagcc tgtccacacc tgggtcttcc tctgtggcca ctcaactcca aatggacctt gtggggtata gccggcacat ggtgtgtgact gtcacccgct tctctgtgtg cttcctgggtc ccagtcctca tcatcacagc ttgtacctc accatcgtgt gcaaaactgca gcgcaaccgc ctggccaaga ccaagaagcc ctccaagatt attgtgacca tcatcattac cttctctctc tgctggtgcc cctaccacac actcaacctc ctagagctcc accacactgc catgcctggc tctgtcttca gcctgggttt gccctggcc actgcccttg ccattgcaa cagctgcatg aaccctatc tgtatgtttt catgggtcag gacttcaaga agttcaaggt ggccctcttc tctgcctgg tcaatgctct aagtgaagat acaggccact ctctctacc cagccataga agctttacca agatgtcatc aatgaatgag aggacttcta tgaatgagag ggagaccggc atgctttgat cctcactgtg gaaccttca atggactctc tcaacctcagg gacaccaag gatagtctt ctgaagatca aggcaagaac ctctttagca tccaccaatt ttaactgcat tttgcatggg atgaacagtg ttttatgctg ggaatctagg gcttgaacc ctttcttctt agtggacaga acatgctgtg ttccatacag ccttggacta gcaatttatg cttcttggga ggccagcctt gactgactca aagcaaaaaa ggaagaattc	Homo sapiens	



235	3845	Chemokine- Like Receptor 1 (CMKLR1)	NP_004063.1	MEDEDYNTSI IIATFMKKKT MFTSVLLTI LHGKISCENN IVCKLQNRNL ALAIANSCMN TSMNERETGM L	SYGDEYPDYL VNMWFLNLA ISSDRICISVL FSLSTPGSS AKTKKPKII PILYVFMGQD L	DSIVVLEDLS VADELFNVFL LPVWSQNHR WPTHSQMDPV VTIIITFFLC FKKFKVALFS RLVNALSEDT TSMNERETGM L	PLEARVTRIF PIHITYAAMD VRLAYMACMV GYSRHMVTV WCPYHTLNL GHSYSPSHRS FTKMSSMNER	LVVVYSIVCF YHWVFGTAMC IWLAFLLSS TRFLCGFLVP VLIITACILT VFSLGLPLAT FTKMSSMNER	P Homo sapiens
236	3846	Sphingolipid Receptor Edg1	NM_001400	gtcgggggca cttcgcccctg cacaaaagc cgccctctag accatggggc gtcaactatg gacaaaggaga atcctggaga atgtactatt gtcaactgac cgggaaggga atagagcgct ctctctctgc atgggctgga aagcactata ctgtactgca aacattttcca atcgtctctga gtgggctgca gctgtgctca cgggcccctta ttcaagcgac caccocaga tcttcttctct ccacccagat caagccagag tagagttagt tatatatctt agctcctaaa tctttgtctg gtgtgcactt ttcatacccc ctgggggttgt tgggaagatg	gcagcaagat cttgagcgag ctggatcact cgttcgtctg ccaccagcgt atatcatcgt acagcattaa acatctttgt ttattggcaa tcttgtctgg gtatgtttgt atatcacaat taatcagcgc actgcattcag tctcttctctg gaatctactc aggccagccg gcgtcttctat aggtgaagac actccggcac tccggatcat ccatcatcgc aagacgaagg agaactggaa gtttggaaa ggaggaagg tcctgtgaac acccccctgg ggaggaagg aatgcactgg agctttgatt ggccccctct gagatgtttt ctgtctcttt tcctcaacgt ggaatgatcg aagatgggtt	gcgaagcgag gtcggggttt catcgaacca gagtagcgcc ccgctggtc cgggcattac actgacctcg cttgctgacc tctggccctc ggccaccacc ggccctgtca gctgaaaatg ctgctgggtc tgcgctgtcc caccacggtc cttggtcagg cagctctgag cgctgctgg ctgtgacatc caaccccatc gtcctgtgc cggcatggaa ggacaacca gagaccatta caccggaaac gctgtccacc aatctctgg ggagaatag aatgcactgg tggaactgg tgccccctct ccttcaactt tgtacatccc tcttttactt atcatctata ggaggtgtaa aacatgttcc	ccggggctct ctccagccaa cagtgaaagg ccttcgctct cctggggaca cagggttggc cagctcgggt gaaagctgaa tatcatcgcg ttctcatctg ccaagaaaatt tggtggtgga gtgggtgttca tctcatctctg cctgcctctg tggtggtgga gatcaggctcc cggcctggaa ccaaaggctct tgtccccatg agtttcaaac ccttcaactt agtttcaaac acacccacc ctccctccc ctacctgaga gttatcagag tatgttgagt acgtaggctg ttcgtgagg ccaagtctt	A Homo sapiens	

237	3846	Sphingolipid NP_001391.2 Receptor Edg1	catgtaagcg ggatccggttt ttggaattt ggttgaagtc actttgattt ctttaaaaa catcttttca atgaaatgtg ttaccatttc atatccattg aagccgaaat ctgcataagg aagccacctt tatctaaatg atattagcca ggtcccttgg tgccttagga gaaacagaca agcaaaacaa agtgaaaacc gaatgatta acttttgcaa accaaggag attcttagc aatgagtct acaaatatg acatcgtct tcccacttt tgttgatgtt tattcagaa tcttggtga ttcatttcaa gcaaacat gttgtattt gttgtgttaa agtactttt cttgattttt gaatgtattt gttcaggaa gaagtcat ttttgattt tctaaccgt gttaactttt ctagaatcca cctcttgtg cccttaagca ttactttaac tggtaggaa cgccagaact ttttaagtcca gctattcatt agatagtaaat tgaagatatg tataatatt acaaagaata aaaatatatt actgtctctt tagtatgtt ttcagtgtcaa ttaaacgag agatgtcttg tttttttaa aagaatagta ttaaataggt tctgacttt tgtggatcat tttgacata gctttatcaa ctttaaaaca ttaataaact gatttttta aag 3846	3847	Sphingolipid NP_005226 Receptor Edg3	catgtaagcg ggatccggttt ttggaattt ggttgaagtc actttgattt ctttaaaaa catcttttca atgaaatgtg ttaccatttc atatccattg aagccgaaat ctgcataagg aagccacctt tatctaaatg atattagcca ggtcccttgg tgccttagga gaaacagaca agcaaaacaa agtgaaaacc gaatgatta acttttgcaa accaaggag attcttagc aatgagtct acaaatatg acatcgtct tcccacttt tgttgatgtt tattcagaa tcttggtga ttcatttcaa gcaaacat gttgtattt gttgtgttaa agtactttt cttgattttt gaatgtattt gttcaggaa gaagtcat ttttgattt tctaaccgt gttaactttt ctagaatcca cctcttgtg cccttaagca ttactttaac tggtaggaa cgccagaact ttttaagtcca gctattcatt agatagtaaat tgaagatatg tataatatt acaaagaata aaaatatatt actgtctctt tagtatgtt ttcagtgtcaa ttaaacgag agatgtcttg tttttttaa aagaatagta ttaaataggt tctgacttt tgtggatcat tttgacata gctttatcaa ctttaaaaca ttaataaact gatttttta aag 3847	239	3847	Sphingolipid NP_005217.1 Receptor Edg3	catgtaagcg ggatccggttt ttggaattt ggttgaagtc actttgattt ctttaaaaa catcttttca atgaaatgtg ttaccatttc atatccattg aagccgaaat ctgcataagg aagccacctt tatctaaatg atattagcca ggtcccttgg tgccttagga gaaacagaca agcaaaacaa agtgaaaacc gaatgatta acttttgcaa accaaggag attcttagc aatgagtct acaaatatg acatcgtct tcccacttt tgttgatgtt tattcagaa tcttggtga ttcatttcaa gcaaacat gttgtattt gttgtgttaa agtactttt cttgattttt gaatgtattt gttcaggaa gaagtcat ttttgattt tctaaccgt gttaactttt ctagaatcca cctcttgtg cccttaagca ttactttaac tggtaggaa cgccagaact ttttaagtcca gctattcatt agatagtaaat tgaagatatg tataatatt acaaagaata aaaatatatt actgtctctt tagtatgtt ttcagtgtcaa ttaaacgag agatgtcttg tttttttaa aagaatagta ttaaataggt tctgacttt tgtggatcat tttgacata gctttatcaa ctttaaaaca ttaataaact gatttttta aag 3847	239	3847	Sphingolipid NP_005217.1 Receptor Edg3	catgtaagcg ggatccggttt ttggaattt ggttgaagtc actttgattt ctttaaaaa catcttttca atgaaatgtg ttaccatttc atatccattg aagccgaaat ctgcataagg aagccacctt tatctaaatg atattagcca ggtcccttgg tgccttagga gaaacagaca agcaaaacaa agtgaaaacc gaatgatta acttttgcaa accaaggag attcttagc aatgagtct acaaatatg acatcgtct tcccacttt tgttgatgtt tattcagaa tcttggtga ttcatttcaa gcaaacat gttgtattt gttgtgttaa agtactttt cttgattttt gaatgtattt gttcaggaa gaagtcat ttttgattt tctaaccgt gttaactttt ctagaatcca cctcttgtg cccttaagca ttactttaac tggtaggaa cgccagaact ttttaagtcca gctattcatt agatagtaaat tgaagatatg tataatatt acaaagaata aaaatatatt actgtctctt tagtatgtt ttcagtgtcaa ttaaacgag agatgtcttg tttttttaa aagaatagta ttaaataggt tctgacttt tgtggatcat tttgacata gctttatcaa ctttaaaaca ttaataaact gatttttta aag 3847
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sapiensHomo  
sapiens

240	3848	C-C Chemokine Receptor 9	NM_006641	<p>NLPDCSTILP LYSKKYIAFC ISIFTAILVT IVILYARIYF LVKSSSRKVA NHNSERSMA LLRTVVIVVS VFIACWSPLF ILFLIDVACR VQACPILFKA QWFIVLAVLN SAMNPVIYTL ASKEMRRRAFF RLVCNCLVRG RGARASPIQP ALDPSRSKSS SSNNSSHSPK VKEDLPHTDP SSCINDKNAA LQNGIFCN</p> <p>gcccctcatc ccaggcagag agcaacccag ctctttcccc agacactgag agctggtggt A gacctgctgtc ccaggcagag ttgcacgccc ctccacaagc cctattcccta acatgggtga tgactatggc tctgaatcca catcttccat ggaagactac gttaaactica acttcaactga cttctactgt gagaaaaaca atgtcaggca gtttgcgagc catttccctc cacccttgta ctggctcgtg ttcatcgtgg gtgacctggg caacagtctt gttatccctg tctactggta ctgcacaaga gtgaagacca tgaccgacat gttccttttg aatttgcaa ttgctgacct cctctttctt gtcactcttc ccttctggc cattgctgct gctgaccagt ggaagtcca gaccttcattg tgcaagggtg tcaacagcat gtacaagatg aacttctaca gctgtgtgtt gctgatcatg tgcacagcg tggacaggta cattgccatt gccaggcca tgagagcaca tacttgagg gagaaaaggc ttgtgtacag caaaatgggt tgctttacca tctgggtatt ggcagctgct ctctgcatcc cagaaatctt atacagccaa atcaaggagg aatccggcat tgctatctgc accatggttt accctagcga tgagagcacc aaactgaagt cagctgtctt gacctgaag gtcattctgg ggttcttctt tccctctctg gtcatggctt gctgctatac catcatcatt cacacctga tacaagccaa gaagtcttcc aagcacaaag ccctaaaagt gacctcact gtcctgacct tctttgtctt gctcagttt cctacaact gcattttgtt ggtgcagacc attgacgctt atgccatgtt catctccaac tgtgacctt ccaccaact tgacatctgc ttccaggta cccagacctt cgccttcttc caggttgcc tgaacctgt tctctatgtt ttgtgggtg agagattccg ccgggatctc gtgaaaaccc tgaagaactt gggttgcatc agccaggccc agtgggtttc atttacaagg agagaggaa gcttgaagct gtcgtctatg ttgctggaga caacctcagg agcactctcc cctgagggg tcttctctga ggtgcatggt tcttttgga gaaatgaga atacagaaac agtttcccca ctgatgggac cagagagat gaaagagaaa agaaaactca gaaagggtg aatctgaact atatgattac ttgtagtcag aatttgccaa agcaaatatt tcaaaatcaa ctgactagt caggaggctg ttgattggct ctgactgtg atgcccgcga ttctcaaaagg agactaagg accggcactg tgagacccc ttggctttgccc actgcccga gcatcaatgc cgtgcctctt ggaggagccc ttggatttc tccatgcact gtgaacttct gtggcttcag ttctcatgct gcctcttcca aaaggggaca cagaagcact ggctgctgct acagaccgca aaagcagaaa gtttcgtgaa aatgtccatc ttgtggaaat ttctaccct gctcttgagc ctgataacc atgccaggtc ttatagattc ctgatctaga acctttccag gcaatctcag acctaatctt ctctgttct ccttgttctg ttctgggcca gtgaaggctc ttgttctgat ttgaaacga tctgcaggtc ttgccagtga accctggac aactgaccac acccaagg catccaaagt ctgttggtt ccaatccatt tctgtgtcct gctggagggt ttaacctaga caaggattcc gcttattct tggtatggtg acagtgtctc tccatggcct gagcagggtg attataacag ctgggttcg aggagccagc ctggccctg ttgtaggctt gttctgttga gtggcacttg ctttgggtcc accgtctgtc tgcctccctag aaaatgggtt ggttcttttg gccctcttct tctgaggcc cactttattc tgaggaatac agtgagcaga tatgggcagc agccaggtag ggcaagggg tgaagcgcag gccttgctgg aaggctattt acttccatgc ttctctttt ctactctat</p>	Homo sapiens
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241	3848	C-C Chemokine Receptor 9	NP_006632.2	at	<p>agtggaaca ttttaaaagc ttttaactta gagattaggc tgaataaat aagtaattga  attcaccttt gcatcttttg tgtctttctt atcatgattt ggcaaatgc atcacctttg  aaaatatttc acatattgga aaagtgcctt ttaattgtga tatgaagcat taattacttg  tcactttctt taccctgtct caatatatta agtgtgtgca attaagatc aaatagatac  at</p>	Homo sapiens
242	3849	G Protein- Coupled Receptor GPR1	NM_005279		<p>atggaagatt tggaggaac attatttga gaatttgaa actattccta tgacctagac A  tattactctc tggagtctga tttggaggag aaagtcacgc tgggagttgt tcaactgggtc  tcctgggtgt tatattgttt ggcctttgtt ctgggaattc caggaaatgc catcgtcatt  tggttcacgg ggctcaagt gaagaagaca gtcaccactc tgtggttctt caactagacc  attcgggatt tcattttctt tctctttctg cccctgtaca tctctatgt ggccatgaat  ttccactggc cctttggcat ctggctgtgc aaagccaatt ccttcactgc ccagttgaac  atggttgcca tggttttttt cctgacagtgc atcagcctgg accactatat ccacttgatc  catcctgtct tatctcatcg gcatcgaacc ctcaagaact ctctgattgt cattatattc  atctggcttt tggcttctct aattggcgtt cctgcccctgt acttcggga cactgtggag  ttcaataatc atactctttg ctataacaat tttcagaagc atgatcctga cctcactttg  atcaggcacc atgttctgac ttgggtgaaa tttatcattg gctatctctt ccttttgcta  acaatgagta tttgctactt gtgtctcacc ttcaaggtag agaagcgaac agtcctgac  tcagtaggc atttctggac aattctggtt gtggttgtgg cctttgtggt ttgctggact  ccttatcacc tgtttagcat ttgggagctc accattcacc acaatagcta ttcccacat  gtgatgcagg ctggaatccc cctctccact ggtttggcat tcctcaatag ttgcttgaa  cccatcctt atgtcctaag tagtaagaag ttccaagctc gcttccggtc ctcatgtgct  gagatactca agtacacact gtgggaagtc agctgttctg gcacagtgcg tgaacagctc  aggaactcag aaaccaagaa tctgtgtctc ctggaacacg ctcaataa</p>	Homo sapiens
243	3849	G Protein- Coupled Receptor GPR1	NP_005270.1		<p>MEDLEETLFE EFENYSYDLD YYSLESDLEE KVLGVVHVW SLVLYCLAFV LGIPGNAIVI P  WFTGLKWKKT VTTLFWNLIA IADFI LLFL PLYISYVAMN FHWPFGIWLC KANSFTAQLN  MEASVFFLTV ISLDHYIHLI HPVLSHRHRT LKNSLIVIF IWLLASLIGG PALYFRDIVE  FNNHTLCYNN FQKHDPDLTL IRHVLTWVK FIGYLFPLL TMSICYLCLI FKVKKRTVLI  SSRHFWTILV VVAVFVVCWT PYHLFSIWEL TIHNSYSHH VMQAGIPLST GLAFINSLCN  PILYVLISKK FQARFRSSVA EILKYTLWEV SCSTVSEQL RNSETKNLCL LETAQ</p>	Homo sapiens
244	3850	G Protein- Coupled Receptor 10 (GPR10)	NM_004248		<p>atggcctcat cgaccactcg ggccccagc gtttctgact tattttctgg gctgccgcg A  gcggtcacaa ctcccgcac ccagagcgca gaggcctcgg cgggcaacgg gtcggtggct  ggcgcgagcg ctccagccgt cacgcccctc cagagcctgc agctggtgca tcagctgaag  gggctgacg tgcgtcteta cagcgtcgtg gtggtcgtgg ggtggtggg caactgcctg  ctggtgctgg tgatcgcgcg ggtgcgcgg ctgcacacac tgacgaactt cctcatcggc  aacctggcct tgcgcgcgt gctcatgtgc accgcctgcg tgccgctcac gctggcctat</p>	Homo sapiens

245	3850	G Protein- Coupled Receptor 10 (GPR10)	NP_004239.1	<p>gccttcgagc cagcgggctg ggtgttcggc ggcggcctgt gccacctggt cttcttctgt  cagccggtca ccgtctatgt gtcggtgttc agcgtcacca ccatcgagtg gaccgctac  gtcgtgctgg tgcacccgct gagcgggcgc atctcgtgc gctcagcgc ctacgctgtg  ctggccatct gggcgctgtc cgcggtgctg ggcgtgccc cgcgctgca cacctatcac  gtggagctca agccgcacga cgtgcgcctc tgcgaggagt tctggggctc ccaggagcgc  cagcgccagc tctacgcctg gggcgctgctg ctggtcacct acctgctccc tctgctggtc  atcctcctgt cttacgtccg ggtgtcagtg aagctccgca accgctggtt gccgggctgc  gtgacccaga gccaggccga ctgggacgc gctcggcgcc ggcgcacctt ctgcttgctg  gtggtggtcg tgggtgtgtt cgcgctctgc tggctgcgc tgcacgtctt caacctgctg  cgggacctcg accccacgc catcgacct tacgcctttg ggtggtgca gctgctctgc  cactggctcg ccatgagttc ggcctgctac aaccttca tctacgctg gctgcacgac  agcttcgcg aggagctcg caactgttg gtcgcttggc ccgcaagat agcccccat  ggccagaata tgacctcag cgtggtcatc tga</p> <p>GLIVLLYSVV VVGLVGNCL LVLVIARVRR LHNVTNFIG NLALSDVLMC TACVPLTLAY  AFEPGRGWVFG GGLCHLVFFL QPVTVYVSF TLTTIAVDYR VVLVHPLRRR ISRLSAYAV  LAIWALSAVL ALPAAVHTYH VELKPHDVRL CEEFWGQSR QQLYAWGLL LVTYLLPLLV  ILLSYVRVSV KLNRVVPFC VTQSQADWDR ARRRRTFCLL VVVVVVFAVC WLPLHVFNLL  RDLDPHADIP YAFGLVQLLC HWLAMSSACY NPFIYAWLHD SFREELRKLL VAWPRKIAPH  GQNMTVSIVI</p>	Homo sapiens
246	3851	G Protein- Coupled Receptor GPR12	NM_005288	<p>atgaatgaag acctgaaggt caatttaagc ggcgtgcctc gggattattt agatgcgct A  gctgcggaga acatctcggc tgctgtctcc tcccggttc ctgcgctaga gccagagcct  gagctcgtag tcaacccctg ggacattgtc ttgtgtacct cgggaacctt catctcctgt  gaaaatgcca ttgtggtcct tatcatcttc cacaacccca gctgcgagc acctatgttc  ctgctaatag gcagcctggc tcttgagac ctgctggcgc gcatgggact catcaccaat  tttgtttttg cctacctgtt tcagtcagaa gccaccaagc tggtcacgat cggcctcatt  gtcgcctctt tctctgcctc tgctgcagc ttgctggcta tcaatgttga ccgctacctc  tcaactgtact acgctctgac gtaccttcg gagaggacgg tcacgtttac ctatgtcatg  ctcgtcatgc tctgggggac ctccatctgc ctggggctgc tgcagacgc tcaccaagaa caacgcggcc  tgccctccgag acgagtcac ctctctctct ctctatgttt gcgctcatgc ttcagctcta catccagatc  atcctctcgg tgctctctct gaaaggggtc tccacctgg ctatcatcct ggggacgttt  tgtaagattg tgatgaggca cgcctcatcag atagccctgc agcacactt cctgggccacg  tcgcaactatg tgaccacccg gaaaggggtc tccacctgg ctatcatcct ggggacgttt  gctgcttgct ggatgccttt caccctctat tcttgatag cggattacac ctacctctcc  atctatacct acgccacct cctgcccgc accataaatt ccatcatcaa ccctgtcata  tatgctttca gaaaccaaga gatccagaaa gcgctctgtc tcatttctg cggctgcatc  ccgtccagtc tcgcccagag agcgctcg cccagtgatg tgtag</p> <p>MNEDLKVNL GLPRDYLDAA AAENISAAVS SRVPAVEPEP ELVNPWDIV LCTSGTLISC P  ENAIIVLIIF HNPSLRAPMF LLIGSLALAD LLAGIGLITN FVFAYLLQSE ATKLVITIGLI  VASFSASVCS LLAITVDRYL SLYVALTYHS ERTVTFTYVM LVMLWGTSC LGLLPVMGWN  CLRDESTCSV VRPLTKNAA ILSVSFLFMF ALMLQLYIQI CKIVMRHAHQ IALQHHFLAT</p>	Homo sapiens
247	3851	G Protein- Coupled Receptor GPR12	NP_005279.1		Homo sapiens

248	3852	CX3C Chemokine Fractalkine Receptor 1	NM_001337	SHYVTRKGV STLAIIIGTF AACWMPFTLY SLIADYTPS IYTYATLLPA TYSIINPVI YAFRNQEIQK ALCLICCGCI PSSLAQRARS PSDV ggggcagatc cagattccct ttgcagtcga cgccaggcct tcaccatgga tcagttccct A gaatcagatga cagaaaaactt tgagtacgat gatttggctg aggcctgtta tattggggac atcgtggctt ttgggactgt gttcctgtcc atattctact cgtcatctt tgccattggc ctgggtggaa atttgttgggt agtgtttgct ctcaccaaca gcaagaagcc caagagtgtc accgacattt acctctctgaa cctggccttg tctgatctgc tgtttgtagc cactttgccc ttctggactc actatttgat aaatgaaaag ggctccaca atgccatgtg caaattcact accgcttct tcttcacgtg cttttttgga agcatattct tcataccgt catcagcatt gataggtacc tggccatcgt cctggccgcc aactccatga acaaccggac cgtgcagcat ggcgtcacca tcagcctagg cgtctgggca gcagccattt tgggtggcagc acccagttc atgttcacaa agcagaaaga aaatgaatgc ctgtgtgact acccgaggt ccttcaggaa atctggccc tgctccgcaa tgtggaaca aattttcttg gtttttctt cttctggaca attatgagtt attgtactt cagaatcacc cagacgtgtt ttctctgcaa gaaccacaag aaagccaaag ccattaaact gatcctctg tgggtcctgc tgttttctt cttctggaca ccctacaacg ttatgattt cctggagacg cttaagctct atgacttctt tcccagttgt gacatgagga aggatctgag gctggccctc agtgtgactg agcgtgttc attagccat tgttgctga atcctctcat ctatgcattt gctggggaga agttcagaag atacctttac cacctgtatg gaaaatgcct ggtgtcctg tgtgggcgtc cagtcacgt tgatttctcc tcacttgaat cacaagagag caggcatgga agtgttctga gcagcaattt tacttaccac acgagtgatg gagatgcatt gctccttctc tgaagggaaat cccaaagcct tgtgtctaca gagaacctgg agttcctgaa cctgatgctg actagtggag aagatttttg ttgttatttc ttacaggcac aaaatgatgg acccaatgca cacaacaaa ccttagagtg ttgttgagaa ttgtgctcaa aatttgaaga atgaacaaat tgaactctt gaatgacaaa gagtagacat ttctcttact gcaaatgtca tcagaacttt ttggtttgca gatgacaaaa attcaactca gactagtta gtaaatgag ggtggtgaat atgttctata ttgtggcaca agcaaaaagg gtgtctgagc cctcaaatg aggggaacca gggcctgagc caagcta NP_001328.1 MDQFPESVTE NFEYDDLAE CYIGDIVFG TVFLSIFYSV IFAIGLVGNL LVVFALTNSK P KPKSVTDIYL LNLSLDLLF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSMMN RTVQHGVTIS LGVMAAAILV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVEFNELGF LLPLIMSYC YFRIQTLES CKNHKKAKAI KLILLVVIVF FLFWTPYNVM IFLETCLKYD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRLYLHLYGK CLAVLCGRSV HVDFSSSEQ RSRHGSVLSS NPTYHTSDGD ALLLL atggaccag aagaaacttc agttatttg gattattact atgctacgag cccaaactct A gacatcaggg agaccactc ccatgttctt tacacctctg tcttcttcc agtcttttac acagctgtgt tctgactgg agtgcctggg aaccttgttc tcatgggagc gttgcatttc aaacccggca gccgaagact gatcgacatc ttatcatca atctggctgc ctctgacttc atthttcttg tcacattgcc tctctgggtg gataaagaag catctcagg actgtggagg acgggctcct tctgtgcaa agggagctcc tacatgatct ccgtcaatat gcactgcagt gtcctcctgc tcacttgcat gagtgttgac cgctacctgg ccattgtgtg gccagtcgta tcaggaaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttatc	Homo sapiens
249	3852	CX3C Chemokine Fractalkine Receptor 1	NP_001328.1	SHYVTRKGV STLAIIIGTF AACWMPFTLY SLIADYTPS IYTYATLLPA TYSIINPVI YAFRNQEIQK ALCLICCGCI PSSLAQRARS PSDV ggggcagatc cagattccct ttgcagtcga cgccaggcct tcaccatgga tcagttccct A gaatcagatga cagaaaaactt tgagtacgat gatttggctg aggcctgtta tattggggac atcgtggctt ttgggactgt gttcctgtcc atattctact cgtcatctt tgccattggc ctgggtggaa atttgttgggt agtgtttgct ctcaccaaca gcaagaagcc caagagtgtc accgacattt acctctctgaa cctggccttg tctgatctgc tgtttgtagc cactttgccc ttctggactc actatttgat aaatgaaaag ggctccaca atgccatgtg caaattcact accgcttct tcttcacgtg cttttttgga agcatattct tcataccgt catcagcatt gataggtacc tggccatcgt cctggccgcc aactccatga acaaccggac cgtgcagcat ggcgtcacca tcagcctagg cgtctgggca gcagccattt tgggtggcagc acccagttc atgttcacaa agcagaaaga aaatgaatgc ctgtgtgact acccgaggt ccttcaggaa atctggccc tgctccgcaa tgtggaaca aattttcttg gtttttctt cttctggaca attatgagtt attgtactt cagaatcacc cagacgtgtt ttctctgcaa gaaccacaag aaagccaaag ccattaaact gatcctctg tgggtcctgc tgttttctt cttctggaca ccctacaacg ttatgattt cctggagacg cttaagctct atgacttctt tcccagttgt gacatgagga aggatctgag gctggccctc agtgtgactg agcgtgttc attagccat tgttgctga atcctctcat ctatgcattt gctggggaga agttcagaag atacctttac cacctgtatg gaaaatgcct ggtgtcctg tgtgggcgtc cagtcacgt tgatttctcc tcacttgaat cacaagagag caggcatgga agtgttctga gcagcaattt tacttaccac acgagtgatg gagatgcatt gctccttctc tgaagggaaat cccaaagcct tgtgtctaca gagaacctgg agttcctgaa cctgatgctg actagtggag aagatttttg ttgttatttc ttacaggcac aaaatgatgg acccaatgca cacaacaaa ccttagagtg ttgttgagaa ttgtgctcaa aatttgaaga atgaacaaat tgaactctt gaatgacaaa gagtagacat ttctcttact gcaaatgtca tcagaacttt ttggtttgca gatgacaaaa attcaactca gactagtta gtaaatgag ggtggtgaat atgttctata ttgtggcaca agcaaaaagg gtgtctgagc cctcaaatg aggggaacca gggcctgagc caagcta NP_001328.1 MDQFPESVTE NFEYDDLAE CYIGDIVFG TVFLSIFYSV IFAIGLVGNL LVVFALTNSK P KPKSVTDIYL LNLSLDLLF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSMMN RTVQHGVTIS LGVMAAAILV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVEFNELGF LLPLIMSYC YFRIQTLES CKNHKKAKAI KLILLVVIVF FLFWTPYNVM IFLETCLKYD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRLYLHLYGK CLAVLCGRSV HVDFSSSEQ RSRHGSVLSS NPTYHTSDGD ALLLL atggaccag aagaaacttc agttatttg gattattact atgctacgag cccaaactct A gacatcaggg agaccactc ccatgttctt tacacctctg tcttcttcc agtcttttac acagctgtgt tctgactgg agtgcctggg aaccttgttc tcatgggagc gttgcatttc aaacccggca gccgaagact gatcgacatc ttatcatca atctggctgc ctctgacttc atthttcttg tcacattgcc tctctgggtg gataaagaag catctcagg actgtggagg acgggctcct tctgtgcaa agggagctcc tacatgatct ccgtcaatat gcactgcagt gtcctcctgc tcacttgcat gagtgttgac cgctacctgg ccattgtgtg gccagtcgta tcaggaaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttatc	Homo sapiens
250	3853	G Protein- Coupled Receptor GPR15	NM_005290	atggaccag aagaaacttc agttatttg gattattact atgctacgag cccaaactct A gacatcaggg agaccactc ccatgttctt tacacctctg tcttcttcc agtcttttac acagctgtgt tctgactgg agtgcctggg aaccttgttc tcatgggagc gttgcatttc aaacccggca gccgaagact gatcgacatc ttatcatca atctggctgc ctctgacttc atthttcttg tcacattgcc tctctgggtg gataaagaag catctcagg actgtggagg acgggctcct tctgtgcaa agggagctcc tacatgatct ccgtcaatat gcactgcagt gtcctcctgc tcacttgcat gagtgttgac cgctacctgg ccattgtgtg gccagtcgta tcaggaaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttatc	Homo sapiens

251	3853	G Protein- Coupled Receptor GPR15	NP_005281.1	MDPEETSVYL KPGSRRLIDI VLLTTCMSVD PYCAEKKATP KIIFIVVAAF IYYIFDSYIR	DYYATSPNS FIINLAASDF RYLAIVWPVV IKLIWSLVAL LVSWLPENTF RAIVHCLCPC	DIRETHSHVP IFLVTLPWMV SRKFRRTDCA IFTFFVPLLS KFLAIVSGLR LKNYDFGSST	YTSVFLPVFY DKEASLGLWR YVVCASIWFI IVTCYCCIAR QEHYLPSSAIL ETSDSHLTKA	TAVFLTGVLG TGSFLCKGSS SCLLGLPTLL KLCAHYQQSG QLGMEVSGPL LSTFIHAEDF	NLVLMGALHF YMSIVNMHCS SRELTLIDDK KHKKLKKSI AFANSCVNPF ARRRKRVSLS	Homo sapiens
252	3854	G Protein- Coupled Receptor GPR18	NM_005292	gaaagagaca ctggaaaacta acactgtttc agtgggaagtg agtatcatgc cccttttaac tatcttcata caagaagaga tataatgact gtacttctgc tcttgccctt acttaaaaac cagcaccacc ctgcctcaag actgacattt tcataatctc aaggatcatc tttcgctttc caccttccctc acaatttcag cagaaaaagt atgaataata cgtcaatgga ttatcttcat	aagcagcaat ctttttaaag cagaaaagac ctgaaaaatg ctaccaacaa agctcacatc attggattat accacggtaa ttaccctttc cagattcttg attagtgtg acgtgcaag cctctgtctac atttctgaca tttttcttga cttcacggca atcacgtgc ctgatgctgg atgaacctca gctcagagta ttccgatctg aggttctttc tattctgtat tttaaaaaaa	taaagtacgc caacaaaaga tattttaaca gtgtaaaaat gctgtaaaat cagatgaata ttgttaacat ccatctatat gaatgtttta gagctctcac acagatacat ccgtgctggc tgctctataa tcactatct ttcctttgtt ggacgtctaa tgggtcaggt gaacggggga gcacgtgtct ttagtgtcat gtagtctacy atttcaatcc atactatca agtcaccttt aaaaaaaaa	ccagcaccaa gtctaaaaa gaagcaact acacagact gatcacccg caaaaatgca cactgcatta gatgaatgtg ttatgcaaaa agtgctttac ggccattgta cgtgtgtggg agaccagat aaaagctgtg catcatgatt gctgaaacc gctcgtctgc ttagtccct aatccctggg cctactaca aattacctc gtcactaagc aatataaaca cactcacta agtcaccttt ctcttgaaaa aataaattca	aaagcgtac ttcttaaat cttcgacaga ttgatggaca atcaacctgt gcccttgtct gtgggtttca gctgtaccac acttgatatt gatgaatggc catttgga ccaagcattg cgtccgaagt cagccgaagt gtctggataa tgacctgac aacgactcca ctcccgccac acctcactcg tggtcattat agaagtccat tccacatctg gagcctttac tcgtttcaaa gaagcatgcg gtgaaatgtt actactctgg aataaattca	Homo sapiens	

253	3854	G Protein-Coupled Receptor GPR18	NP_005283.1	<p>MITLNNQDQ VPFNSSHPDE YKIALVFPYS CIFIIGLFVN ITALWVFSCT TKKRITVTIY P</p> <p>MMNVALVDLI FIMTLPRMF YYAKDEWPF G EYFCQILGAL TVFPYSIALW LLAFISADRY</p> <p>MAIVQPKYAK ELKNTCKAVL ACVGWIMTL TTTTPLL LLY KDPDKDSTPA TCLKISDIY</p> <p>LKAVNVNLTL RLTFEFLIPL FIMIGCYLVI IHNLLHGRTS KLPKPKVEKS IRIITLLVQ</p> <p>VIVCFMPFHI CFAFLMLGTG ENSYNPWGAF TTFLMNLSTC LDVILYIYS KQFOARVISV</p> <p>MLYRNYLRSM RRKSFRRGSL RSLSNINSEM L</p>	Homo sapiens
254	3855	G Protein-Coupled Receptor GPR19	NM_006143	<p>aattaagaga aaaaaagtga atatgtttt tgctcacaga atggataaca gaaagccaca A</p> <p>tttgattatt cctacacttc tgggtgccct ccaaaacgc agctgcactg aaacagccac</p> <p>acctctgcca agccaatacc tgatggaatt aagtggagg cacagttgga tgagcaacca</p> <p>aacagacctt cactatgtgc tgaaccccg ggaagtggc acagccagca tcttcttgg</p> <p>gattctgtgg ttgttttcta tcttcggcaa tccctgggt ttgttggtca tccataggag</p> <p>taggaggact cagtctacca ccaactactt tgtggtctcc atggcatgtg ctgacctct</p> <p>catcagcgtt gccagcacgc ctttcgtctt gctccagttc accactggaa ggtggacgct</p> <p>gggtagtga acgtgcaagg ttgtgcgata ttttcaatat ctaactccag gtgtccagat</p> <p>ctacgttctc ctctccatct gcatagacc gttctacacc atcgtctatc ctctgagctt</p> <p>caaggtgtcc agagaaaaag ccaagaaaat gattgcggca tegtggatct ttgatgcagg</p> <p>ctttgtgacc cctgtgctct ttttctatgg ctccaactgg gcagtcatt gtaactattt</p> <p>cctccctcc tcttgggaag gcactgccta cactgtcatc cacttcttgg tgggcttgt</p> <p>gattccatct gtctcataa ttttatttta ccaaaaggtc ataaaatata ttggagaat</p> <p>aggcacagat gcccgaacgg tgaggaggac atgaacatt gtccctcgga caaaagtga</p> <p>aactataag atgttctca ttttaaatct gttgtttttg ctctcctggc tgccttttca</p> <p>tgtagctcag ctatggcacc cccatgaaca agactataag aaaagttccc ttgttttcac</p> <p>agctatcaca tggatatcct ttagttcttc agcctctaaa cctactctgt attcaattta</p> <p>taatgccaat ttctggagag ggatgaaga gactttttgc atgtcctcta tgaatgtta</p> <p>ccgaagcaat gcctatacta tcacaacaag tccaaggatg gccaaaaaaa actacgttgg</p> <p>catttcagaa atcccttcca tggccaaaac tattaccaa gactcatct atgactcatt</p> <p>tgacagagaa gccaaaggaaa aaaagcttgc ttggcccat aactcaaat caccaaaatc</p> <p>ttttgtctaa gttctcattc tttcaattgt tatgcaccag agattaaaaa gctttaacta</p> <p>taaaaacaga agctatttac atatttgttt tcaactcaact tccaaggga atgtttttat</p> <p>tttgtaaaat gcattcattt gttactgt</p>	Homo sapiens
255	3855	G Protein-Coupled Receptor GPR19	NP_006134.1	<p>MVFAHRMDNS KPHLIPTLL VPLQNRSGTE TATPLPSQYL MEISEHSWM SNQTDLHYVL P</p> <p>KPGEVATASI FFGILWLF SI FGNSLVCLVI HRSRRTQSTT NYFVVSMA CA DLLISVASTP</p> <p>FVLLQFTTGR WTIGSATCKV VRYFQYLTPG VQIYVLLSIC IDRFYIVYP LSFKVSREKA</p> <p>KKMIAASWIF DAGFVTPVLF FYGSNWDSHC NYFLPSSWEG TAYTVIHFLV GFVIPSVLII</p> <p>LFYQKVIKYI WRIGTDGRTV RRTMNIVERT KVKTIKMLI LNLLFLSWL PFHVAQLWHP</p> <p>HEQDYKKSSL VFTAITWISF SSSASKPTLY SIYNANFRG MKETFCMSSM KCYRSNAYTI</p> <p>TTSSRMAKN YVGISEIPSM AKTITKDSIY DSFDREAKEK KLAWPINSNP PNTFV</p>	Homo sapiens
256	3856	G Protein-Coupled Receptor GPR2/CCR10	NM_016602	<p>agagatgggg accgaggcca cagagcaggt ttcctggggc cattactctg gggatgaaga A</p> <p>ggacgcatac tcggctgagc cactgcggga gctttgctac aagccgatg tccaggcctt</p> <p>cagccggggc ttccaaccca gtgtctcctt gaccgtggct gcgctgggtc tggccggcaa</p> <p>tggcctggct ctggccacc accctggcgc ccgacgcgca gcgcgctgc ccacctctgc</p>	Homo sapiens



257	3856	G Protein- Coupled Receptor GPR2/CCR10	NP_057686.1	<p>ccacctgtc cagctggccc tggcggacct cttgctggcc ctgactctgc ccttcggcgg  agcaggggct cttcagggct ggagctctgg aagtggcacc tgcgcacca tctctggcct  ctactcgcc tcttccacg cggcttctt cttctctggc tgtatcagcg ccgaccgcta  cgtggccatc gcgcagcgc tcccagccgg gccggcgccc tccactcccg gccgcgcaca  cttggctcc gtcactgtgt ggtgctgtc actgctctg gcgtgctctg cgtgctctt  cagccaggat ggccagcggg aaggccaacg acgctgtcg ctcacttcc ccgaggccct  cacgcagacg gtgaaggggg cgagcgccgt ggcgagggt gccctgggct tgcgctgcc  gctggcgctc atgtagcct gctacgcgt tctggcgccg acgctgctgg ccgccagggg  gcccagcgc cggcgtgccc tgcgctctg ggtggctctg gtggcgccct tctggtgct  gcagctgcc tacagcctcg cctgctgct gatactgct gatctactgg ctgcgcga  gcgagctgc cctgcagca aacgcaagga tctgcactg ctggtgacca gggcttggc  cctgccccg tgtggcctca atccgttct ctacgcctt ctggcgctgc gttccgcca  ggacctggg aggetgctac ggggtgggag ctgcacctca gggcctcaac cccgcggcg  ctgccccgc cggccccgc tttctctg ctacgctccc acggagacc acagtctctc  ctggacaac taggctgctg aatctagagg aggggctcg tgggaaaggg  gagtaggctg gggaacactg agaaagagg agggacctaa agggactacc tctgtgctt  gccacattaa attgataaca tggaaatgaa aaaaaaaaaa aaaa</p>	Homo sapiens
258	3857	G Protein- Coupled Receptor GPR20	NM_005293	<p>atgcctctg tgtctccagc gggggcctcg gccggggcag tccccaatgc caccgagtg A  aacaagtg gccaccaatgc cagcgggctg gaggtgccc tgttccacct gttgcccgg  ctggacgag agctgcatg cacttccca gccctgtgcg tggcgctgat ggcggtgac  ggagccatct tctggcagg gctggtgctc aacgggctgg cgtgtactg cttctgctg  cgcacccgg ccaagacacc ctacgtcctc tacaccatca acctggtgt gaccgatcta  ctggtaggc tgtccctgcc cagcgcttc gctgtgtact acggcgccag gggctgctg  cgctgtgct tcccgacgt cctcggttac tctctcaaca tgcactgctc cactctctc  ctcacctgca tctgctgga ccgtacctg gccatctgct ggcgcgaagc tcccgccgc  tgccgccagc ctgctgtgc caggccgtg tgcgcttgc tgtggctggc cgccggtgccc  gtcacctctg cggctgtgg cgtgacagg agccggccct gctgcctgt ctttgcctg  actgtcttg agtctctgct gccctgctg gtcacagcg tgtttaccgg ccgcatcatg  tgtgactgt cgcggccggg tctgtccac cagggtgccc agcgcgctg gcgggccatg  cagctctgc tcaagtgct cactatctt cctgctgct tcaagccct ccacgcccgc  caagtggccg tggcgtgtg gccgacatg ccacaccaca cgagcctgt ggtctaccac  gtggccgtga cctcagcag cctcaacagc tgcattgacc ccactgtcta ctgctctgc  accagtggct tccaggccac cgtccgaggc ctcttcggcc agcacggaga gcgtgagccc  agcagcggtg acgtggtcag catgcacagg agctccaaag gctcaggccc tcatcacatc</p>	Homo sapiens

259	3857	G Protein-Coupled Receptor GPR20	NP_005284.1	ctcagtgccg gccctcagc cctcacccag gccctggcta atggggccga ggcttag	Homo sapiens
				GAIFLAGLV NGLALVFCC RTRAKTPSVI YTNLVVTDL LVGLSLPTRE AVYGGARGCL	
				RCAPFHVLGY FLNMHCSILF LTCICVDRL AIVRPEAPAA CRQPACARAV CAFVWLAAGA	
				VTLSVLGVTG SRPCCRVAL TVLEFLPLL VISVFTGRIM CALSRPGLLH QGRQRRVRAM	
				QLLLTVLIIF LVCFTPEHAR QVAVALWPDH PHHTSLVVYH VAVTLSSLNS CMDPIVYCFV	
260	3858	G Protein-Coupled Receptor GPR21	NM_005294	TSGFQATVRG LFGQGEREP SSGDVSMHR SSKGSGRHHI LSAGPHALTQ ALANGPEA	Homo sapiens
				atgaactcca ccttgatgag taatcagagc agccacctt ttgcctctt ggcatttggc A	
				tatttggaaa ctgtcaattt ttgccttttg gaagtattga ttattgtctt tctaactgta	
				ttgattatt ctggcaacat cattgtgatt ttgttattc actgtgcacc ttgttgggagc	
				catcacata caagttattt tatccagact atggcatatg ctgacctttt tgttgggggtg	
				agctgcgtgg tcccttcttt atcaactctc catcacccc ttccagtaga ggagtccttg	
				acttggccaga tatttggtt tttagtatca gttctgaaga cgtctccat ggttctctg	
				gcctgtatca gcattgatg atacattgcc attactaac cttaaccta taatactctg	
				gttacacct ggagactacg cctgtgtatt ttccctgatt ggctatactc gacctggtc	
				ttccctgctt cctttttcca ctggggcaaa cctggatc atggagatg gttcagtg	
				tgtgcggagt cctggcacac cgactcctac ttacacctg tcatcgtgat gatgttat	
				gccccagcag cctttattg ctgcttcacc tatttcaaca tcttcgcat ctgccaacag	
				cacacaaagg atatcagcga aaggcaagc cgcttcagca gccagagtg ggagactggg	
				gaagtgcagg cctgtcctga taagcgtat gccatggctc tgttcgaat cactagtga	
				ttttacatcc tctggttgc atatatcatc tactcttctg tggaaagctc cactggccac	
				agcaaccgct tgcctcctt ctgaccacc ttgcttgcta tagtaaacag tttctgcaac	
				tgtgtaatt atagtctctc caacagcta ttccaaagag gactaaagc cctctcaggg	
				gctatgtgta cttcttgctg aagtcagact acagccaag acccttacac agttagaagc	
				aaaggccctc ttaatggatg tcatatctga	
261	3858	G Protein-Coupled Receptor GPR21	NP_005285.1	MNSTLDGNQS SHPFCLLAG YLETVNFCLL EVLIIVFLTV LIISGNIIV FVHCAPLLN P	Homo sapiens
				HHTTSYFIQT MAYADLFVG SCVPSLSLL HHPLPVEESL TCQIFGFVVS VLKSVSMASL	
				ACISIDRYIA ITKPLTYNTL VTPWRLRLCI FLIWLYSTLV FLPSFFHWGK PGYHGDVFAQ	
				CAESWHTDSY FTLFIVMMLY APAALIVCFT YFNIFRICQQ HTKDISERQA RFSSQSGETG	
				EVQACPDKRY AMVLEFRITSV FYILWLPYII YFLLESSTGH SNRFASFLT WLAISSFCN	
				CVIYSLNSV FORGLKRLSG AMCTSCASQT TANDPYTVRS KGPLNGCHI	
262	3859	G Protein-Coupled Receptor GPR22	NM_005295	atgtgtttt cctccattct gaaatcaac atgcagctg aatctaactc tacagtcgca A	Homo sapiens
				gatgacatg atgacatcaa caccaatatg taccacacc tatcatatcc gttaaagctt	
				caagtgtctc tcaccggatt tcttatgta gaaattgtg tgggacttgg cagcaacctc	
				actgtattgg tactttactg catgaaatcc aacttaatca actctgtcag taacattatt	
				acaaatgaatc ttcatgtact tgaatgaata atttgtgtg gatgtattcc tctaactata	
				gttatccctc tgctttcact ggagagtaac actgctctca ttgtctgtt ccatgaggct	
				tgtgtatctt ttgcaagtgt cteaacagca atcaacgctt ttgtatcac ttggacaga	
				tatgacatct ctgtaaaacc tgcaaaccca attctgacaa tgggcagagc tgtaattgta	
				atgatatcca ttggatttt ttctttttc tcttctctga ttcttttat tgaggtaaat	

263	3859	G Protein- Coupled Receptor GPR22	NP_005286.1	<p>tttttcagtc ttcaaaagtgg aaatacctgg gaaaaaaga cacttttatg tgtcagttaca  aatgaatact acactgaact gggaatgtat tatcactgtg tagtacagat cccaatattc  tttttcactg ttgtagtaat gtaatacaca tacaccaaaa tacttcaggc tcttaatat  cgaataggca caagatttc aacagggcag aagaagaaag gcagtggagg gagaaatgta  tctctaacca cacaacatga ggctacagac atgtcacaaa tccggcgagc tgtgaaacga  gtctttgggtg taagaacttc agtttctgta ataattgccc tccggcgagc gattatttct  cacctgaac gacgagaag acaaaagaga gtcttcagga tgtctttatt gattatttct  acatttcttc tctgctggac accaatttct gtttaataa ccaccatttt atgtttaggc  ccaagtacc ttttagtaaa attaagattg tgttttttag tcatggctta tggaaacaact  atatttcacc ctctattata tgcattcact agacaaaaat ttcaaaagggt cttgaaaagt  aaaatgaaaa agcgagttgt tctatagta gaagctgac ccctgcctaa taatgctgta  atacacaact cttggataga tcccaaaaga acaaaaaaaa ttacctttga agatagtga  ataagagaaa aacgtttagt gctcagggt gtacacagact ag</p>	Homo sapiens
264	3860	G Protein- Coupled Receptor SLC/MCH1	NM_005297	<p>MCFSFILEIN MQSESNIIVR DDIDDINTNM YQPLSYPLSF QVSLTGFLML EIVLGLGSNL P  TVLVLYCMKS NLINSVSNII TMNLHVLVDVI ICVGCIPLTI VILLLSLESN TALICCFHEA  CVSFASVSTA INVEAITLDR YDISVKPANR ILTMGRAVML MISIWIFSF SFLIPFIEVN  FFSLQSGNTW ENKTLICVST NEYYTELGMV YHLVQIPIF FFTVAVMLIT YTKILQALNI  RIGTRFSTGQ KKKARKKTI SLTQHEATD MSQSSGGRNV VFGVRTSVSV IIALRRAVKR  HRERERQKR VFRMSLLIIS TELLCWTPIS VLNTTILCLG PSDLLVKLRL CFLVMAYGTT  IFHPLLYAFT RQKFQKVLKS KMKKRVSVIV EADPLPNNAV IHNSWIDPKR NKKITFEDSE  IREKRLVPQV VTD</p>	Homo sapiens
264	3860	G Protein- Coupled Receptor SLC/MCH1	NM_005297	<p>atgttgtgtc ctccaagac agatggctca gggcaactctg gtaggattca ccaggaaaact A  catggagaag ggaagaggga caagattagc aacagtgaag ggaggagaga tgggtggaga  ggattccaga tgaacgggtgg gtcgctggag gctgagcatg ccagcaggat gtcagttctc  agagcaaaagc ccatgtcaaa cagccaacgc ttgtctcttc ttgtccccagg atcacctcct  cgcaaggga gcatctccta catcaacatc atcatgcctt cgggtgttcgg caccatctgc  ctcctgggca tcatcgggaa ctccacgggc atcttcggg tcgtgaagaa gtccaagctg  cactgggtga acaacgtccc cgacatcttc atcatcaacc tctcggtagt agatctctc  ttctcctgg gcatgccctt catgatccac cagctcatgg gcaatggggt gtggcacitt  ggggagacca tgtgcacctt catcacggcc atgagtgcca atagtcagtt caccagcacc  tacatcctga ccgccatggc cattgaccgc tactgggcca ctgtccacc catctcttcc  acgaagttcc ggaagccctc tgtggccacc ctgtgtgatc gcctcctgtg ggcctctctc  ttcatcagca tcacctctgt gtggctgtat gcaagactca tccccctccc aggaggtgca  gtgggctgcy gcatacgctt gccaaccca gacatgacc tctactggtt caccctgtac  cagtttttcc tggcctttgc cctgcctttt gtgtcatca cagccgcata cgtgaggatc  ctgcagcgca tgacgtcttc agtggccccc gcctcccagc cagcatccg gctgcggaca  aagaggggtga cccgcacagc catgccatc tgtctggtct tctttgtgtg ctgggcacc  tactatgtgc tacagctgac ccagttgtcc atcagccgac cgacctcac ctttgtctac  ttatacaatg cggccatcag cttgggctat gccaacagct gcctcaacc ctttgtgtac  atcgtgtctc gtgagacgtt ccgcaaacgc ttgtcctctg cgggtgaagc tgcagccag  gggcagcttc gcgctgtcag caacgctcag acggtgacg aggagaggac agaaagcaaa</p>	Homo sapiens

265	3860	G Protein- Coupled Receptor SLC/MCH1	NP_005288.1	gagacaccta MLCPSKTDGS GHSGRIHQET HGEGRDKIS NSEGRENGGR GFQMGGSLE AEHASRMSVL P RAKPMNSQR LLLSPGSP RTGSISYINI IMPSVFGTIC LLGIIGNSTV IFAVVKSKL HWCNNVPDIF IINLSVVDLL FLLGMPFMIH QLMNGVWHF GETMCTLITA MDANSQFTST YILTAMAI DR YLATVHPIS QFFLAFAALPF VVITAAYVRI LQMTSSVAP ASQSRILRT VCGGIRLPNP DTDLYWETLY YVLFVFCWAP YVLFVFCWAP YVLFVFCWAP YVLFVFCWAP KRVTRTAIAI CLVFFVFCWAP YVLFVFCWAP YVLFVFCWAP YVLFVFCWAP YVLFVFCWAP IVLCETFRKR LVLSVKPAAQ GQLRAVSNAQ TADEERTESK GT atggccccca cagagccctg gagccccagc cgggggtcag cgccctggga ctactcggg A ttggacggcc tggagagct ggagctgtgt cgggcccggg acctgcccta cggctacgtc tacatccccg cgtctacct ggcgcccttc gccgtgggcc tgcctgggcaa cgcctttgtg gtgtggctgc tggcggggcg cggggggccc cggcggtctg tggatacctt cgtgctgcac ctggcgccag ctgacctggg cttcgtgctc acgtgccc cgtggggccc ggcggcggt aggcgccgt ggccgttcgg cgtggtcgg gcaagctca gcaagctcgc gctggcgggc acgcgctcgg cggcgccgt gctgctggcg gcaatgagcg tggaccgcta cctggccgtg gtgaagctgc tcgagcgag gccactgc gccactgc cgcctgcc cgcctgcc cgcctgcc ggcgtctgg cgtggcgct gctggcgcc cgcctgcc cgcctgcc cgcctgcc ccccgcctg ggggcccagg cagccagtgc ggcagagagc cctccacgc cttccaggc ctcagcttcg tctgctgct gctgaccttc gctgaccttc gctgaccttc gctgaccttc tactgccga tctcgcgcg cctgcgacg cctgcgacg cctgcgacg cctgcgacg tcgctgcga tcatcttcg cctgcgacg cctgcgacg cctgcgacg cctgcgacg gcccgcggg cgtcttcga cctgcgacg cctgcgacg cctgcgacg cctgcgacg ctgctggcg tgcgtgggg cctcaccatt gccactgcc tggcctcgt caacagctgc gccaacccgc tcatctacct cctgctggag cgtcattcc gagccggcg cgtggacggg gctgcggcg gcaccggcg cctgcgacg aggatcagct cagcctcctc gctcctcagg gacgacagtt cgtgttccg ttgcggggc cagcccgca acactgcctc ggcctcctgg tag	Homo sapiens
266	3861	G Protein- Coupled Receptor GPR25	NM_005298	atggccccca cagagccctg gagccccagc cgggggtcag cgccctggga ctactcggg A ttggacggcc tggagagct ggagctgtgt cgggcccggg acctgcccta cggctacgtc tacatccccg cgtctacct ggcgcccttc gccgtgggcc tgcctgggcaa cgcctttgtg gtgtggctgc tggcggggcg cggggggccc cggcggtctg tggatacctt cgtgctgcac ctggcgccag ctgacctggg cttcgtgctc acgtgccc cgtggggccc ggcggcggt aggcgccgt ggccgttcgg cgtggtcgg gcaagctca gcaagctcgc gctggcgggc acgcgctcgg cggcgccgt gctgctggcg gcaatgagcg tggaccgcta cctggccgtg gtgaagctgc tcgagcgag gccactgc gccactgc cgcctgcc cgcctgcc cgcctgcc ggcgtctgg cgtggcgct gctggcgcc cgcctgcc cgcctgcc cgcctgcc ccccgcctg ggggcccagg cagccagtgc ggcagagagc cctccacgc cttccaggc ctcagcttcg tctgctgct gctgaccttc gctgaccttc gctgaccttc gctgaccttc tactgccga tctcgcgcg cctgcgacg cctgcgacg cctgcgacg cctgcgacg tcgctgcga tcatcttcg cctgcgacg cctgcgacg cctgcgacg cctgcgacg gcccgcggg cgtcttcga cctgcgacg cctgcgacg cctgcgacg cctgcgacg ctgctggcg tgcgtgggg cctcaccatt gccactgcc tggcctcgt caacagctgc gccaacccgc tcatctacct cctgctggag cgtcattcc gagccggcg cgtggacggg gctgcggcg gcaccggcg cctgcgacg aggatcagct cagcctcctc gctcctcagg gacgacagtt cgtgttccg ttgcggggc cagcccgca acactgcctc ggcctcctgg tag	Homo sapiens
267	3861	G Protein- Coupled Receptor GPR25	NP_005289.1	PGSAPWDYSG LDGLEELELC PAGDLPYGYV YIPALYLAA AVGLLGNFV P VWLLAGRRGP RRLVDTFVLH LAAADLGFVL TLFWMAAAA RRPWFGDGL CKLSTFALAG TRSAGALLIA GMSVDRLAV VKLEARPLR TPRCAVASCC GWAVALLAG LPSIVYRGLQ PLPGQDSQC GEEPSHAFQ LSLLLLLLTF VPLVVTFLC YCRISRRLLR PHVGRARRN SLRIIFAIES TFVGSWLPFS ALRAVFLAR LGALPLPCPL LLALRWGLTI ATCLAFVNSC ANPLIYLLLD RSFRARALDG ACGRTGLAR RISSASSLSR DDSSVFCRA QAANTASASW atgatgtggg gtgcaggcag cctcctggcc tggctctcag ctggctcagg caactgaat A gtaagcagcg tgggcccagc agagggggcc acaggtccag cgcaccact gccctcgcct aaggcctgg atgtgtgct ctgcatctca ggcacctgg tgcctcga gaatgcgcta gtgtggcca tcatcgtgg cactcctgc ttcctgccc ccatgttct cgtggtggg agcctggcg tggcagacct gctggcagg cctggcctgg tctgacct tctgctgtc ttctgcatcg gctcagcga gatgagcctg gtgctggtg cgtgctggc aatggcctt accgccagca tcggcagct actggcctc actggcctc tctgtacaat	Homo sapiens
268	3862	G Protein- Coupled Receptor GPR3	NM_005281	atgatgtggg gtgcaggcag cctcctggcc tggctctcag ctggctcagg caactgaat A gtaagcagcg tgggcccagc agagggggcc acaggtccag cgcaccact gccctcgcct aaggcctgg atgtgtgct ctgcatctca ggcacctgg tgcctcga gaatgcgcta gtgtggcca tcatcgtgg cactcctgc ttcctgccc ccatgttct cgtggtggg agcctggcg tggcagacct gctggcagg cctggcctgg tctgacct tctgctgtc ttctgcatcg gctcagcga gatgagcctg gtgctggtg cgtgctggc aatggcctt accgccagca tcggcagct actggcctc actggcctc tctgtacaat	Homo sapiens

269	3862	G Protein-Coupled Receptor GPR3	NP_005272.1	<p>gacctacact actattcaga gacaacagtg acacggacct atgtgatgct ggccttagtg</p> <p>tgaggaggtg cctgggacct ggggctgctg cctgtgctgg cctggaactg cctggatggc</p> <p>ctgaccacat gtggcgtggt ttatccactc tccaagaacc atctggtagt tctggccatt</p> <p>gccttcttca tgggtgtttg catcatgctg cagctctacg cccaaatctg ccgcacgtc</p> <p>tgccgccatg ccagcagat tgcccttcag cggcacctgc tgcctgcctc ccactatgtg</p> <p>gccacccgca agggcattgc cacactggcc gtgggtgctg gaggccttgc cgcctgctgg</p> <p>ttgcccttca ctgtctactg cctgctgggt gatgccact ctccacctct ctacacctat</p> <p>cttaccttgc tccctgccac ctacaaactc atgatcaacc ctatcatcta cgccttcgc</p> <p>aaccaggatg tgcagaaagt gctgtgggct gtctgctgct gctgttcctc ttccaagatc</p> <p>cccttccgat cccgctcccc cagtgatgct tag</p> <p>MMWAGSPLA WLSAGSGNVN VSSVGPAGP TGPAAPLPSP KAWDVVLCIS GTLVSCENAL P</p> <p>VVAIIIVGTPA FRAPMFLVVG SLAVADLLAG LGLVLHFAAV FCIGSAEMSL VLVGVLAMAF</p> <p>TASIGSLAI TVDRYISLYN ALTYISETTV TRTYVMLALV WGGALGLGLL PVLAWNCLDG</p> <p>LTTGCVVYPL SKNHLVVLAI AFFMVFGLM QLYAQICRIV CRHAQIALLQ RHLLPASHYV</p> <p>ATRKGIATLA VVLGAFACW LPFTVYCLLG DAHSPPLYTY LTLPATYNS MINPIIYAFR</p> <p>NQDVQKVLWA VCCCSCKI PFRSRSPSDV</p>	Homo sapiens
270	3863	G Protein-Coupled Receptor GPR31	NM_005299	<p>atgccattcc caaactgctc agccccagc actgtggtgg ccacagctgt ggggtgcttg A</p> <p>ctggggctgg agtgtgggtt gggctgctg ggaacgcgg tggcgctgtg gacttccctg</p> <p>ttccgggtca ggggtggaa gccgtacgct gtctacgct tcaacctggc cctggctgac</p> <p>ctgctgttgg ctgctggcct gccttctctg gccgcttct acctgagcct ccaggcttgg</p> <p>catctgggct gtgtggctg ctgggcccct gccttccctc tggacctcag ccgcagcgtg</p> <p>gggatggcct tccctggcgc cgtggcttgg gaccgtacc tccgtgtggt ccacctcgg</p> <p>cttaaggctca acctgctgtc tctcaggcg gccctgggg tctcgggctc cgtctggctc</p> <p>ctgatggctg cctcacctg cccgggcttg ctcatctctg aggcgcgcca gaactccacc</p> <p>aggtgccaca gtttctactc cagggcagac ggctccttca gcctcatctg gcaggaaqca</p> <p>ctctcctgcc ttcagtttgt cctccccctt ggctcatcg tgtctgcaa tgcaggcctc</p> <p>atcaggggctc tccagaaaag actccgggag cctgagaaac agccaagct tcagggggccc</p> <p>caggcactgg tcaccttggt ggtggtgctg ttgtctctgt gcttctgctc ctgcttccctg</p> <p>gcagagctcc tgatgcacat ctccagaaat ctggggagct gcagggccct ttgtgcagtg</p> <p>gctcatacct cggatgtcac gggcagcctc acctacctgc acagtgtcgt caaccctgtg</p> <p>gtatactgct tctccagccc cacttcagg agctcctatc ggagggtctt ccacacctc</p> <p>cgaggcaaa ggcaggcagc agagccccca gatttcaacc ccagagactc ctattctcta</p> <p>MPFNCAPS TVVATAVGV LGLCEGLGLL GNAVALWTEL FRVRVWKPYA VYLLNLALAD P</p> <p>LLLAACLPLF AAFYLSLQAW HLGRVGCWAL RFLDLSRSV GMFLAAVAL DRYLRVVR</p> <p>LKVNLLSPQA ALGVSGLVWL LMVALTCPL LISEAAQNST RCHSFYSRAD GSFSIIWQEA</p> <p>LSCLQFVLPF GLIVFCNAGI IRALQKRLRE PEKQPKLQRA QALVTILVVVL FALCFELPCFL</p> <p>ARVLMHIFQN LGSCRALCAV AHTSDVTGSL TYLHVVNPV VYCFSSPTFR SSYRRRVFHTL</p> <p>RGKQAAEPP DFNPRDSYS</p>	Homo sapiens
272	3864	G Protein-Coupled Receptor	NM_005282	<p>ctggtgacct tacttatctc tgttgcttcc tggggctccta ggaaatgcca gcactccac A</p> <p>ccacattgcc tgaactttcc aacactccct agctgcgctg tgtcctatct caacacttcc</p> <p>tcattgattt cttgtgtctt ctagaacatt cccccgcat tattacttca atatggctac</p>	Homo sapiens

GPR4

acatacttcc taattgccct gcaaacccatc tccttctcac cattgcccag cgatgtcttc  
gtctctctca taaacactcc cgagagaccaa tttttgtgtc acccccatatc tcccteqttg  
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273	3864	G Protein-Coupled Receptor GPR4	NP_005273.1	ttcacaggcg tcaccatata caagtaata aaaaatatgt aatgtttgga attgct MGNHTWEGCH VDSRVDHLFP PSLYIFVIGV GLPTNCLALW AAYRQVQQRN ELGVYIMNLS P IADLLYICTL PLWVDYFLHH DNWHTGPGSC KLFGEFITYN IYISIAFLCC ISVDRYLAVA HPLRFARLR VKTAVAVSSV VWATELGANS APLFHDELFR DRYNHTFCFE KFPMEGWVAW MNLRYFVGF LFPWALMLLS YRGLRAVRG SVSTERQEK KIKRLALS LI AIVLVCFAFY HVLLSRS AI YLGRPWDCGF EERVFSAYHS SLAFTSLNCV ADPILYCLVN EGARSDVAKA LHNLRLFLAS DKPQEMANAS LTLETPLTSK RNSTAKAMTG SWAATPPSQG DQVQLKMLPP AQ	Homo sapiens
274	3866	G Protein-Coupled Receptor GPR6	NM_005284	atgaacgcga gcgcgcctc gctcaacgac tcccaggtgg tggtagtggc ggccgaagga A gcgcgcgcgc gcgcacagc agcagggggc cggacacgg gcgaatgggg acccctgct gcgcgcgcgc taggagccgc cggcggagct aatgggtctc tggagctgtc ctgcagctg tcgcgcgcgc caccgggact cctgctgcca gcggtgaatc cgtgggacgt gctcctgtgc gtgtcgggga cagtgatgc tggagaaaa gcgctggtgg tggcgctcat cgcgtccact ccgcgcgtgc gcacgcccac gtctgtgctg gtaggcagcc tggccaccgc tgacctgttg gcgcgcgtgt gcctcatctt gcactttgtg ttccagtact tggtgccctc ggagactgtg agtctgtca cgggtggcct cctcgtggcc tctctgccc gcctgtgtag cagcctgtgc gccattacgc tggaccgcta cctgtccctg tataacgcgc cctgtgctc ctgcgcgcgc accctgttgc gcgtgcacct cctgcttgc gccacttga cctgtccct aggcctgggg ctgctgcgcgc tgctgggctg gaactgcctg gcagagcgc cgcctgtag cgtgggtgcg ccgcgtgcgc gcagccacgt gctctgtctc tccgcgcct tctcatggt cttcggcact atgctgcacc tgtactgtgc catctgccag gtggtctggc gccacgcga ccagatcgcg ctgcagcagc actgcctggc gccaccccat ctcgctgcca ccagaaaggc tgggggtaca ctggcgttgc tgctgggccc ttcgggcgc agctggctgc ccttcgcat ctattgctg gtgggcagcc atgaggaccc ggcgtgtctac acttacgcca cctgctgccc cgcacccac aactccatga tcaatcccat catctatgct tccgcgaacc aggatccca gcgcgcctg tggtcctcgc tctgtggctg tttccagtc aaagtgcct ttcgttccag gtctccacg gaggtctga	Homo sapiens
275	3866	G Protein-Coupled Receptor GPR6	NP_005275.1	SQVWVVAEG AAAATAAGG PDTGEWPPA AAALGAGGGA NGSLELSSQL P SAGPPGLLP AVNPWDVLLC VSGTVIAGEN ALVVALIAST PALRTPMFVL VGSLATADLL AGCGLILHFV FQYLVSETV SLITVGFIVA SFAASVSSLL AITVDYLSL YNALTYYSRR TLIGVHLLA ATWTVSLGLG LLPVIGWNL AERAACSVVR PLARSHVALL SAAFFMVFGI MLHLYVRICQ VWRHAHQIA LQHCCLAPPH LAATRKGVGT LAVVLGTFGA SWLPFAIYCV VGSHPDPAVY TYATLLPATY NSMINPIYA FRNQEIQRAL WLLCGCFQS KVPFRSRSPS EV	Homo sapiens
276	3867	G Protein-Coupled Receptor GPR7	NM_005285	atggacaacg cctcgttctc ggagccctgg cccgcacaacg catcgggccc ggaccggcg A ctgagctgct ccaacgcgc gactctggcg cgcctgccc gcgcctggc ggtggctgta ccagttgtct acgcggtgat ctgcgcgtg ggtctggcg gcaactccgc cgtgctgtac gtgttgctgc gggcgcccc catgaagacc gtcaccaac tgttcatcct caacctggcc atcgccgacg agctcttcac gctgtgctg cccatcaaca tcgccgactt cctgctgcgg cagtgccctc tcggggagct catgtgcaag ctcatcgtgg ctatcgacca gtacaacacc	Homo sapiens

277	3867	G Protein- Coupled Receptor GPR7	NP_005276.1	<p> tcttcagcc tctacttctt cactgtcatg agcgccgacc gctacctggt ggtgtggcc  actgcggagt cgcgcgggt ggcggccgc acctacagc ccgcgcgcg ggtgagcctg  gccgtgtggg ggatcgtcac actcgtcgtg ctgccctcg cagtcttcgc ccggttagac  gacgagcagg gccggcgcca gtgctgcta gtcttccgc agcccgaggc cttctggtgg  cgcgagacc gcctctaac gctcgtgctg gctctgcca tccccgtgc caccatctgt  gtcctctata ccacctgct gtccggcgtg catgccatgc ggctggacag ccacgccaag  gccctggagc gcgccaagaa ggcgggtgacc ttcctggtgg tggcaatcct ggcgggtgctg  ctcctctgct ggagcccta ccacctgagc accgtggtgg cgctcaccac cgacctcccg  cagacggcg tggtcacgc tatctctac ttcatacca gcctgacgta cgccaacagc  tgcccaacc ccttctcta cgccttctg gacgccagct tccgcaggaa cctccggcag  ctgataactt gccgcgcgcg agcctga  MDNASFSEP PANASGPDPA LSCSNASTLA PLPAPLAVAV PVVYAVICAV GLAGNSAVLY P  VLLRAPRMKT VTNLFILNLA IADELFTLVL PINIADFLLR QWPFEGELMCK LIVAIQXNT  FSSLYFLTM SADRYLVWLA TAESRRVAGR TYSAARAVSL AVWGIVTLW LPFAVEARLD  DEQRRQCVL VFQPEAFW RASRLYTLVL GFAIPVSTIC VLYTLLCRL HAMRLDSHAK  ALERAKKRV FLVVAAILAVC LLCWTPYHLS TWALTTDLP QTPLVIAISY FITSLTYANS  CLNPFLYAF LITCRAAA </p>	Homo sapiens
278	3868	G Protein- Coupled Receptor GPR8	NM_005286	<p> atgcaggcgg ctgggcacc agagccctt gacagcagg gctccttct cctcccccag A  atgggtgcca acgtctctca ggacaatggc actggccaca atgccacctt ctccgagcca  ctgccgttcc tctatgtgt cctgcccgc cctgtactcg ggatctgtgc tgtggggctg  actggcaaca cggccgtcat cctgtaatc ctaaggcgc ccaagatgaa gacggtgacc  aacgtgttca tctgaacct ggcgtgcgc cactgcctct caagctggt actgcccgtc  aacatgcgg agcactgct gcagtactgg ccttcgggg agtgcctctg caagctggtg  ctggccgtcg accactaaa catcttctcc agcatctact tctagccgt gatgagcgtg  gaccgatacc tgggtgtgct gccaccgtg aggtcccgc acatgccctg gcgcacctac  cggggggcga aggtcgccag cctgtgtgtc tggctggcg ctagcgtcct gttctgccc  ttcttctct tgcgtggcgt ctacagcaac gagctgcagg tcccaagctg tgggctgagc  ttcccgctgg ccgagcgggt ctggttcaag gccagccgtg tctacacttt ggtccctggc  ttcgtgctg ccgtgtgcac catctgtgtg ctctacacag acctcctgc caggctgcgg  gccgtgcggc tccgctctgg agccaaggct ctaggcaagg ccaggcgga ggtgaccgtc  ctggtcctcg tgcgtgtggc cgtgtgctc cctgctgga cgcccttcca cctggcctct  gtcgtggccc tgaccacgga cctgcccag accccactgg tcatcagtat gtcctacgtc  atcacagcc tcaagtacgc caactcgtc ctgaacctt tctctacgc cttcttagat  gacaacttc ggaagaactt ccgcagcata ttgcggtgct ga  MQAAGHPEPL DSRGSFSLPT MGANVSQDNG TGHNATFSEP LPFLYVLLPA VYSGICAVGL P  TGNTAVILVI LRAPKMTVT NVFILNLAVA DGLFTLVLPV NIAEHLQYW PFGE LCKLV  LAVDHYNIFS SIYFLAVMSV DRYLVVLATV RSRHMPWRTY RGAKVASLCV WLGVTVLVLP  FFSFAGVYSN ELQVPSCGLS FPWPERVWFK ASRVYTLVLG FVLPVCTICV LYTDLLRRLR  AVRLRSGAKA LGKARRKVTV LVLVVLAVCL LCWTPFHLAS VVALTTDLPQ TPLVISMSYV  ITSLTYANSC LNPFLYAF LITCRAAA </p>	Homo sapiens
279	3868	G Protein- Coupled Receptor GPR8	NP_005277.1	<p> gacaacttc ggaagaactt ccgcagcata ttgcggtgct ga  MQAAGHPEPL DSRGSFSLPT MGANVSQDNG TGHNATFSEP LPFLYVLLPA VYSGICAVGL P  TGNTAVILVI LRAPKMTVT NVFILNLAVA DGLFTLVLPV NIAEHLQYW PFGE LCKLV  LAVDHYNIFS SIYFLAVMSV DRYLVVLATV RSRHMPWRTY RGAKVASLCV WLGVTVLVLP  FFSFAGVYSN ELQVPSCGLS FPWPERVWFK ASRVYTLVLG FVLPVCTICV LYTDLLRRLR  AVRLRSGAKA LGKARRKVTV LVLVVLAVCL LCWTPFHLAS VVALTTDLPQ TPLVISMSYV  ITSLTYANSC LNPFLYAF LITCRAAA </p>	Homo sapiens



280	3869	G Protein- Coupled Receptor HM74	NM_006018	cgccactttg ctggagcatt cactaggcga ggcgctccat cggactccact agccgcactc A	Homo sapiens
				atgaatcggc accatctgca ggatcaccttt ctggaaatag acaagaagaa ctgctgtgtg	
				ttccgagatg acttcattgc caaggtgttg ccgcccgtgt tggggctgga gtttatcttt	
				gggcttctgg gcaatggcct tgccctgtgg attttctgt tccacctcaa gtcctggaaa	
				tccagccgga ttttctgtt caacctggca gtagctgact ttctactgat catctgcctg	
				ccgttcgtga tggactacta tggcggcgt tcagactgga actttgggga catcccttgc	
				cggtcgtgac tcttcattgt tgccatgaac cgccaggga gcatcatctt cctcagcgtg	
				gtggcggtag acaggtattt ccgggtggtc catcccacc acgcccagaa caagatctcc	
				aattggacag cagccatcat ctcttgctt ctgtgggga tcaactgttg cctaacagtc	
				caactcctga agaagaagt gctgattccg aatggccctg caaatgtgtg catcagcttc	
				agcatctgcc atacttccg gtggcagaa gctatgttcc tcttgagtt cctcctgccc	
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				gaccggcatg ccaagatcaa gagagccatc accttcata tgggtgtggc catcgtcttt	
				gtcatctgct tcttcccag cgtggttgtg cggatccgca tcttctggct cctgcacact	
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				tggactcagg gaagagactc acatgctttg gttagtatct gtgttccgg tgggtgtaat	
				aggggattag cccagaagg gactgagcta aacagtgtta ttatgggaaa ggaatggca	
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				attaaaaagg aaacgtgcct ctgcccacg ggtagagggg gtgcacgttc ctctggttc	
				cttcgcttgt gttctgtac ttacaaaaa tctaccactt caataaat ttagaggaga	
				caaaaaaaaa a	
281	3869	G Protein- Coupled Receptor HM74	NP_006009.1	MNRHLLQDHF LEIDKNKCCV FRDDFIKVL PPVIGLEFIF GLLGNGLALW IFCFHLKSWK P	Homo sapiens
				SSRIFFENLA VADELLIICL PFVMDYYVRR SDWNFGDIPC RLVLFFMFMN RQGSIIFLT	
				VAVDRYFRV HPHHALNKIS NWTAAIISCL LWGITVGLTV HLLKKILLIQ NGPANVCISF	
				SICHTFRWHE AMFLIEFLLP LGIILFCSAR IIWSLRQROM DRHAKIKRAI TFIMVVAIVE	
				VICFLPSVV RIRIFWLLHT SGTQNCVYR SVDLAFFITL SFTYMNMLD PVVYFSSPS	
				FPNFFSTLIN RCLQRMTGE PDNNRSTSV LTGDPNKTGR APEALMANSG EPWSPSYLGP	

282	3870	G Protein- Coupled Receptor OGRI	NM_003485	TSNNHKKGH CHQEPASLEK QLGCCIE	atggggaaca tcaactgcaga caactcctcg atgagctgta ccacgacca taccatccac A cagacgctgg ccccggtggt ctatgttacc gtgctggtgg tgggcttccc ggccaactgc ctgtccctct acttcggcta cctgcagatc aaggcccgga acgagctggg cgtgtacctg tgcaacctga cgggtggcga cctcttttac atctgtctgc tgcctttctg gctgcagtac gtgtgcagc acgacaactg gtctcacggc gacctgtcct gccaggtgtg cggcatcctc ctgtacgaga acatctacat cagcgtgggc ttctctgtct gcattctcgt ggaccgtac ctggctgtgg cccatccctt ccgcttccac cagttccgga cctgaaggc ggccgtcggc gtcagcgtgg tcatctgggc caaggagctg ctgaccagca tctacttctt gatgcacgag gaggtcatcg aggacgagaa ccagaccgc gtgtgctttg agcactaccc catccaggca tggcagcgcg ccatcaacta ctaccgcttc ctggtgggt tctcttccc catctgcctg ctgctggcgt cctaccaggg catcctgcgc gccgtgcgc ggagccacgg caccagaag agccgcaagg accagatcca gggctgggtg ctacgacccg tggatcatctt cctggcctgc ttctgcctt accacgtgtt gctgctgggt cgcagcgtct gggaggccag ctgcgacttc gccaaggcg ttttcaagc ctaccacttc tccctcctgc tcaccagctt caactgcgtc gccgaccccg tgctctactg cttcgtcagc gagaccacc accgggacct gggcgccctc cgcggggcct gcctggcctt cctcacctgc tccaggaccg gccgggccag ggaggcctac ccgctgggtg ccccgaggc ctccgggaaa agcggggccc aggtgagga gcccgagctg ttgaccaagc tccaccggc cttccagacc cctaaactgc cagggtcggg cgggttcccc acgggcaggt tggcctag	Homo sapiens
283	3870	G Protein- Coupled Receptor OGRI	NP_003476.1	MGNITADNSS MSCTIDHTIH QTLAPVYVT VLVGFPANC LSLYFGYLQI KARNELGVYL P CNLTVDLFY ICSLPFWLQY VLQHDNWSHG DLSCQVCGIL LYENIYISVG FLCISVDRI LAVAHPRFH QFRTLKAAGV VSVVIWAKEL LTSIYFLMHE EVIEDENQHR VCFEHIPIQA WQRAINYYRF LVGFLFPICL LLASYQILRL AVRSHGTQK SRKDQIQRLV LSTVWIFLAC FLPYHVLLLV RSVWEASCDF AKGVFNAYHF SLLTSENCV ADPVLYCFVS ETTHRDLARL RGACLAFLTC SRTGRAREAY PLGAPEASGK SGAQGEPEL LTKLHPAFQT PNSPGSGGFP TGRLA	Homo sapiens	
284	3921	Prostacyclin Receptor	NM_000960	agcaagtga ggcacagacg cacgggacag gagagcctgg gcaagactgg agagcccaga A cctgggatgg cggattcgtg caggaacctc acctactgc ggggtcgggt ggggccggcc accagcaccc tgatgttcgt ggcgggtgtg gtgggcaacg ggtggccctt gggcatcctg agcgacggc gaccggcgcg cccctcgcc ttccgggtgc tggtaaccgg actggcgcc accgacctgc tgggcaccag cttcctgagc cgggccgtgt tcgtggccta tgcgcgcaac agctccctgc tgggcttggc ccgaggcgcc cccgcccctt gcgatgcctt cgccttcgcc atgaccttct tcggcctggc gtccatgctc atctcttttgc ccatggcctt ggagcgtgc ctggcgctga gccacccta cctctacgag cagctggagc ggccccgctg cggccgctg gcgtgccag ccatctacgc cttctgcgtc cttctctgag cgctgcccc gctgggcctg ggccaacacc agcagtaactg ccccggcagc tgggtcttcc tccgcatgag ctggggccag ccgggcggcg ccgccttctc gctggcctac gccggcctgg tggccctgct ggtggctgcc atcttctctt gcaacggctc ggtcacccctc agcctctgcc gcattgtacc ccagcagaag cgccaccagg gctctctggg tccacggcg cgcaccggag aggacgaggt ggaccacctg	Homo sapiens	

285	3921	Prostacyclin NP_000951.1 Receptor	atcctgtcgg cctcatgac agtggtcatg gccgtgtgct cctgcctct cagatccgc tgcttcccc aggtgtgcg cctgacagc agcagtgaga tggggacct cttgccttc cgcttctacg cctcaaccc cactctggac cctgggtct tcatctttt ccgcaaggct gtcttccagc gactcaagct ctgggtctgc tgcctgtgcc tgggctctgc ccagggagac tcgagacac ccttttccca gctgcctcc gggaggagg acccaagggc cccctctgct cctgtgggaa aggaggggag ctgctgcct ttgtcggtt gggcgaggg gcaggtggag cccttgctc ccacacagca gtccagcggc agcgcctgg gaactgtgc caagcagaa gccagctgc cctgctcct ctgtgacat ttcaagctga cctgtgac tctgcctgt cttcgggga caggagccag aaatcagg acatggctga tggctgcgga tctggaacc ttggccccc aactctggg ccgacagct gctgttctc ctgcggcagg gcagtcgctg ctggctctgg gaagagagtg agggacagag gaaacgttta tctggagtgc cagaaagaa ggttctctca aaataaccag tggcctggc gacctgctc ggcctggat tccccatca tctcattgtc taaatattta gaaggcggag aagttccag aggttctgt acagtcaggt ctgctctggt ctgggtgctg gctccaatct gcgtccactt agggggccca actgcccacc ccaagtcccc aggggatggc cctccctcct taccagacca ctccaagagc cagccccctt tctgtccac aaaaaccaca gttattggaa agctccctg ccttcccttg ccgctggtcc cccaccaggc ttgggagccc tggcatccca agggggaac gggagggaagg ggagctgct gcattgtggg tgatgacgta ggacatgtgc ttggtacaaa aagggcctga gacattccac ct	Homo sapiens
286	3923	Prostaglandin D2 Receptor	LLGTSFLSPA VFVAYARNSS LLGLARGGPA LCDAFAFAMT FFGLASMLIL FAMAVERCLA LSHPYLYAQL DGPRCARLAL PAIYAFCVLE CALPLLGLGQ HQQYCPGSWC FLRMRWAQPG GAAFSLAYAG LVALIVAAIF LCNGSVTLSL CRMYRQQRH QGSLGPRPRT GEDEVHLIL LAIMTWMAV CSLPLTIRCF TQAVAPDSSS EMGDLLAFRF YAFNPILDPW VFILFRKAVF QRLKLMVCCCL CLGPAHGDSD TPLSQLASGR RDRAPASAPV GKEGSCVPLS AWGEGQVEPL PPTQSSGSA VGTSSKAEAS VACSLC gctgtgcaac ctggcgccca tgcgcaacct ctatgcgatg caccggcggc tgcagcgga A cccgctctcc tgcaccaggg actgtgccga gccgcgcgcg gacgggaggg aagcgtcccc tcagccctcg gaggagctgg atcacctct gctgctggcg ctgatgaccg tgctcttcac tatgtgtct ctgcccgtaa ttatcgcg tttactatgga gcatttaagg atgtcaagga gaaaaacagg acctctgaag aagcagaaga cctccagacc ttgcgatttc tatctgtgat ttcaattgtg gaccttggga tttttatcat tttcagatct ccagtatttc ggatatattt tcacaagatt ttcattagac ctcttaggta caggagcccg tgcagcaatt ccactaacat ggaatccagt ctgtgacagt gtttttcaact ctgtggtaag ctgaggaata tgtcacattt tcagtcaaaag aacca	Homo sapiens
287	3923	Prostaglandin D2 Receptor	MKSPFYRCQN TTSVEKGNESA VMGGVLFSTG LLGNLLALGL LARSLGWCS RRPLRLPSV P FMYLVGGLTV TDLLGKCLLS PVVLAAYAQN RSLRVLAPAL DNSLCQAF AFMSFFGLSST LQLLAWALEC WLSLGHFFFY RRHITLRGA LVAPVVSASF LAFCALPFMG FGKVVQYCPG TWCFIQWHE EGSLSVLGYS VLYSSIMALL VLATVLCNLG AMRNLYAMHR RLQRHPRSC RDCAEPRADG REASPOPLEE LDHLLLLALM TVLFTMCSLP VIYRAYYGA KDVKEKNRTS EEAEDLRALR FLSVISIVDP WIFIFRSPV FRIFHKIFI RPLRYRRCNS NSTNMESSL	Homo sapiens

288	3924	Prostaglandin E Receptor EP1	NM_000955	<p> gggggaggca gggctagagc gccgtgatg gggacccac atcccaggca gtccgggca  ccctggcgc tgacatgagc ccttgccgc gtcccaaca cgtggccgt gccgcgtgc ggcgttcgc  ccacatgagc ggcgccttg gtcccaaca cgtggccgt gccgcgtgc ggcgttcgc  ccgcgtgac catctctcc atgacgttg gccgcgtgc gccgcgtgc ggcgttcgc  tgctgggca ggcgcgttg gccgcgtgc gccgcgtgc gccgcgtgc ggcgttcgc  tcgtggccag cctgctggc accgacctg gccgcgtgc gccgcgtgc ggcgttcgc  tgctgtgta cactggggg gccgcgtgc gccgcgtgc gccgcgtgc ggcgttcgc  gcatggtctt cctggcctg tgcccgctg cgtccacg cgtccacg cgtccacg  gcgtgggct cagcgccg gccgcgtgc gccgcgtgc gccgcgtgc ggcgttcgc  tgccgtggc cgcgtggc gccgcgtgc gccgcgtgc gccgcgtgc ggcgttcgc  tgcccgcta tgagctgag taccgggca cgtggtgct catcgccgt ggtcccccgc  ggcgctggc ccaggcact cttgctggc tctcgccag cctcgccgt gtcgcgtcc  tcgccgcgt ggtgtgcaac acgtcagc gccctggc gccctggc gccctggc  gccgtccgc accgctccc ccgcctcag gcccgacag ccgcgtgc tgggggggc  acggacccgc ctcggcctc gccctgctc gcagagctc gcccgacag tccacctct  ttggcgctc tcggagcag ggtcggtc atggtggtg cgtgctgc ctcgagcca atgctggtg  tgcccgact gtcggtgc gccctgct cctccctc cagcgccca cgttctctg  ccgtgctc tgccctctg aaccagatc tggaacctg ggtgtacat cctgctgc  agccgtgct gcgcaactg cctgcctc tgcccgag gcccgagc agggcgcc  ccgcgggct ggcctaaca ccgagcct ccgagggcc cgtgctgc agtcccccgc  acagcgcc cagcactc taagcaca cagagggcc cagactaag cagcccccc  tgccgtggc ccaggtgag ggcgcagc cttggggaat aaaaagccat cctgagc  MSCGPLNLS LAGEATTCAA PWPNTSAVP PSGASPALPI FMTLGAVSN LLALLAQA P  AGRLRRRSA TTFLLFVASL LATDLAGHVI PGALVRLTYT AGRAPAGGAC HFLGGCMVFF  GLCPLLGCG MAVERCVGVT RPLHAARVS VARARLALAA VAAVALAVAL LPLARVGRYE  LQYPTWCFI GLGPPGGWRQ ALLAGLFASL GLVALLAALV CNTLSGLALH RARWRRSR  PPRSGPDSR RRGAGHGRS ASASSASSIA SASTFFGSR SSGSARRARA HDVEMVGLV  GIMVSCICW SPMLVLVALA VGGWSSTSLQ RPLFLAVRLA SWNQILDPMV YILLRQAVLR  QLRLPLPPRA GAKGGPAGLG LTPSAWEASS LRSSRHSGLS HF  ggcgccgct cggcgctg ggtcgggaa ggggctctg gattcggtc cctcccttt A  ttcctctgag tctcggaag ctcagctct cagacctct tctcccagg taaaggccg  gagagggag cgcctctct tccagggc cccacatgg gcaatgcct caatgactcc  cagctgag actcgagac gcagagtg cttcccccag gcgaagccc agccatcagc  tcctcatgt tctcgccgc ggtgctggg aacctcatg cactggcgt gctggcggc  cgtggcgcc ggaacgtgg gtgcagcgc gcccgagga gctccctct cttgttccac  gtctggtga ccgagctgt gttccagc cgtctggga cctgcctcat cagccagtg  gtactggct cgtacgcgc gaacagacc cgtggtggc tggcgccga gagccgcgc  tgacctact tcgcttcgc catgacctt ttcagcctg ccacgatgt catgtcttc  gccatggcc tgagagccta cctctgac cctcgatc gggacccct actctacca gcgcgcgc  tcggcctcc gggcgctgc cgtgctgct gtcctctat cagctccct gctctctgc </p>	Homo sapiens
289	3924	Prostaglandin E Receptor EP1	NP_000946.1	<p> MSCGPLNLS LAGEATTCAA PWPNTSAVP PSGASPALPI FMTLGAVSN LLALLAQA P  AGRLRRRSA TTFLLFVASL LATDLAGHVI PGALVRLTYT AGRAPAGGAC HFLGGCMVFF  GLCPLLGCG MAVERCVGVT RPLHAARVS VARARLALAA VAAVALAVAL LPLARVGRYE  LQYPTWCFI GLGPPGGWRQ ALLAGLFASL GLVALLAALV CNTLSGLALH RARWRRSR  PPRSGPDSR RRGAGHGRS ASASSASSIA SASTFFGSR SSGSARRARA HDVEMVGLV  GIMVSCICW SPMLVLVALA VGGWSSTSLQ RPLFLAVRLA SWNQILDPMV YILLRQAVLR  QLRLPLPPRA GAKGGPAGLG LTPSAWEASS LRSSRHSGLS HF  ggcgccgct cggcgctg ggtcgggaa ggggctctg gattcggtc cctcccttt A  ttcctctgag tctcggaag ctcagctct cagacctct tctcccagg taaaggccg  gagagggag cgcctctct tccagggc cccacatgg gcaatgcct caatgactcc  cagctgag actcgagac gcagagtg cttcccccag gcgaagccc agccatcagc  tcctcatgt tctcgccgc ggtgctggg aacctcatg cactggcgt gctggcggc  cgtggcgcc ggaacgtgg gtgcagcgc gcccgagga gctccctct cttgttccac  gtctggtga ccgagctgt gttccagc cgtctggga cctgcctcat cagccagtg  gtactggct cgtacgcgc gaacagacc cgtggtggc tggcgccga gagccgcgc  tgacctact tcgcttcgc catgacctt ttcagcctg ccacgatgt catgtcttc  gccatggcc tgagagccta cctctgac cctcgatc gggacccct actctacca gcgcgcgc  tcggcctcc gggcgctgc cgtgctgct gtcctctat cagctccct gctctctgc </p>	Homo sapiens
290	3925	Prostaglandin E Receptor EP2	NM_000956	<p> ggcgccgct cggcgctg ggtcgggaa ggggctctg gattcggtc cctcccttt A  ttcctctgag tctcggaag ctcagctct cagacctct tctcccagg taaaggccg  gagagggag cgcctctct tccagggc cccacatgg gcaatgcct caatgactcc  cagctgag actcgagac gcagagtg cttcccccag gcgaagccc agccatcagc  tcctcatgt tctcgccgc ggtgctggg aacctcatg cactggcgt gctggcggc  cgtggcgcc ggaacgtgg gtgcagcgc gcccgagga gctccctct cttgttccac  gtctggtga ccgagctgt gttccagc cgtctggga cctgcctcat cagccagtg  gtactggct cgtacgcgc gaacagacc cgtggtggc tggcgccga gagccgcgc  tgacctact tcgcttcgc catgacctt ttcagcctg ccacgatgt catgtcttc  gccatggcc tgagagccta cctctgac cctcgatc gggacccct actctacca gcgcgcgc  tcggcctcc gggcgctgc cgtgctgct gtcctctat cagctccct gctctctgc </p>	Homo sapiens

291	3925	Prostaglandi NP_000947.1 n E Receptor EP2	<p>tgcgtgccc tgctggacta tgggcagtac gtccagtact gccccgggac ctggtgcttc  atccggcacg ggcgaccgc ttacctgcag ctgtacgcca cctgctgct gcttctcatt  gtctcggtgc tgcctgcaa cttcagtgct atttcaacc tcaccgcat gcaccgccga  agcggagaa gccgctgcgg acctccctg ggcagtggcc gggcgggccc cggggccgcg  aggagagggg aaaggggtgc catggcgag gagcggacc acctcattct cctggctatc  atgaccatca ccttcgcctg ctgctcctg ccttcacga ttttgcata tatgaatgaa  acctttccc gaaaggaaa atgggacctc caagctctta ggtttttatc aattaattca  ataattgacc ctgggtctt tgccatcctt aggcctcctg ttctgagact aatgcgttca  gtcctctgtt gtcggattc attagaaca caagatgcaa cacaaacttc ctgttctaca  cagtcagatg ccagtaaca ggctgacctt tgagtgcatg agtttaaaag ttcttagtta  tatagcatct ggaagatcat ttgaaattg ttccctggag aatgaaaac agtgtgtaaa  caaaatgaag ctgccctaat aaaaaggagt atacaacat ttaagctgtg gtcaaggcta  cagatgtgct gacaaggcac ttcatgtaaa gtgcagaag gagctacaaa acctaccctc  aatgagcatg gtacttgccc ttggaggaa caatcggtcg cattgaagat ccagctgcct  attgatttaa gctttcctgt tgaatgacaa agtatgtggt ttgttaattt gtttgaacc  ccaaacagtg actgtacttt ctattttaat ctgctacta ccgttataca catatagtgt  acagccagac cagattaaac ttcatatgta atctctagga agtcaaatg tggaaagcaac  caagcctgct gtcttggtgat cacttagcga accttttatt tgaacaaatga agttgaaaaat  cataggcacc ttttactgtg atgtttgtgt atgtgggagt actctcatca ctacagtatt  actcttaciaa gagtggactc agtgggttaa catcagtttt gtttactcat cctccaggaa  ctgcaggta agttgtcagg ttattttatt tataatgtcc atagtcta atagtatcaag  aagactttag gaatgggtct ctcaacaaga aataaatgaa atgtctcaag gcagttaatt  ctcataata ctcttattat cctatttctg ggggaggatg tacgtggcca tgtatgaagc  caaatattag gcttaaaaac tgaaaaatct ggttcattct tcagatatatc tggaaccttt  ttaaagtga tattggggcc atgagtaaaa tagattttat aagatgactg tgttgtaaca  aaattcatct gtctatatct tatttagggg aacatgggtt gactcatctt atatgggaaa  ccatgtagca gtgagtcata tcttaaatg ttctaaatg ttggcatgt aatgtaaaac  tcagcatcaa aatatttcag tgaatttgca ctgtttaatc atagttactg tgtaaaactca  tctgaaatgt taaaaaata aactataaaa Ca</p> <p>MGNASNDQS EDCETQWLP PGESPAISSV MFSAGVLGNL IALALLARW RGDVGCsAGR P  RSSLSEHVL VTELVTDL L GTCLISPVVL ASYARNQTLV ALAPESRACT YFAFAMTFFS  LATMLMLFAM ALERYLSIGH PYFYQRRVSA SGGLAVLPVI YAVSLLFCSL PLDDYGQYVQ  YCPGTWC FIR HGRTAYLQLY ATLLLLLVIS VLACNFSVL NLIRMHRRSR RSRGSPSLGS  GRGGPGARR GERVSMAEET DHLILLAIMT ITFVAVCSLPF TIFAYMNETS SRKEKWDLQA  LRFLSINSII DPWFALIRP PVLRLMRSVL CCRISLRTQD ATQTSCTQS DASKQADL</p> <p>atgagaaaaa gaagactcag agagcaagag gaattttggg gaaattaa A  n E2  Receptor EP3</p>	Homo sapiens
292	3926	Prostaglandi L32662 n E2 Receptor EP3	<p>accagaggtt tccagagag gaagcgctgg ctccctccc ggcacgtgag ccctggcgcc A  gccggcgccg cgggtccagc agcgagtag ggcggcggtt gcgccccga ccatgggggg  cagccagcc ccagcgcgcg taaacgcga cctccgccc gcgccgcgc gcgtctgccc</p>	Homo sapiens
293	3926	Prostaglandi NM_000957 n E2 Receptor EP3		Homo sapiens

294	3926	Prostaglandin E2 Receptor EP3	NP_000948.1	ac	cctcccgctg cggctctctg gacgccatcc cctcctcacc tcgaagccaa catgaaggag accggggct acggaggga tgcccccttc tgacccgcc tcaaccactc ctacacaggc atgtggggc cggagcgtc cggcaggcg cggggaacc tcacggccc tcagggtct ggcaggatt gcgatcggt gtcgctggc ttcccgata ccatgctgt cactggtttc gtgggcaacg cactggccat gctgctcgtg tcgcgcagt accggcgccg ggagagcaag cgaaagaagt ccttctcgt gtgcacggc tgctggggc tcaccgacct ggtcgggcag cttctacca ccccggtcgt catcgtcgtg tacctgtcca agcagcgttg ggagcacatc gaccgctgg ggcgctcgt cacctttttc ggcctgacca tgactgtttt cgggctctcc tcgttgttca tcgccagcg catggccgtc gagcggggc tgcccatcag ggcggccgac tggtatgca gccacatga gacggtgccc acccgcgctg tgctgctcg cgtgtggctg gccgtgctg ccttcgccc gctgcccgtg ctggcgctgg gccagtacac cgtccagtgg ccggggagct ggtgcttcat cagcacggg cgagggggca acgggactag ctcttcgcat aactgggca accttttctt cgcctctgcc ttgtccttc tggggtctt ggcgtgaca gtcaccttt cctgcaacct ggcaccatt aaggccctgg tgtcccgtg cggggccaaag gccacggcat ctacgtccag tgccagtg ggcgcatac cgaccgagac ggccattcag cttatggga tcatgtcgt gctgtcgtc tgctggtctc cgctcctgat aatgatgtg aaatgatct tcaatcagac atcagttgag cactgcaaga cacacacgga gaagcagaaa gaatgcaact tcttctaat agctgttcg ctggcttcac tgaaccagat ctggatcct tggttttacc tgctgttaag aaagatcctt ctccgaaagt ttgtccagat gaaaaaga agactcagag agcaagagat gggcctgat ggaaggtgt ttgtcatgc atggaggcag gtccccagga ctgtgtgcag ttctcatgat agagaacct cagtggtcca gctaaagtga tgacttgag ataatctgc ctaacctgg gatgaagtat cgtgaacta ttttgacagc agatgaggaa ttttgggaa attaaacct gcctttctgc caggatcaca tcactggaag ctccatgact ctctttttgt aaagaaaaa aaaaacacag aaacacccac ctccaaact attctcttt acttctccc ccaagccac ccccaatat aactgttat cagaagctgt tatgtcctgt ttccatacat gttttgtac ttttactata tctacataca tcaattaaac ttatgtccta ttgttttgtg aatttatatt tgcgtataca ttatcatatg taaaatttgc atttttttat tgaataattat gtttcttgag atttatccac attgaaacat ggagctctaa atcgttaatt ttaaccgcta tagagtattc cataatttga ataaagcata attgttgt ac	Homo sapiens
295	3927	Prostaglandin E Receptor EP4	NM_000958	ls	TGFEVGNALAM LLVRSYRRR ESKRKSFL CIGWALATDL VGQLLTPV IVVYLSKQRW EHIDPSGRLC TFFGLTMTVF GLSLFIASA MAVERALAIR APHWYASHMK TRATRAVLIG VWLAVLAFAL LPVLGVGQYT VQWPGTWCFI STGRGNGTS SSHNWGNLFF ASAFALIGLL ALTVTFSCNL ATIKALVSR RAKATASQSS AQWGRITET AIQLMGIMCV LSWCWSPLLI MMLKMFNQI SVEHCKTHTE KQKCNFFLI AVRLASLNQI LDPWVYLLR KILLRKFQCM RKRLREQEM GPDGRFCFA WRQVPTWCS SHDREPCSVQ cggcacagcc tcacacctga acgctgtcct ccgcagacg agaccggcg gactgcaaa A gctgggactc gtctttgaag gaaaaaaat agcagagtaag aaatccagca ccattcttca ctgacccatc ccgctgcacc tctgtttcc caagttttg aaagctggca actctgacct cgggtgtccaa aaatcgacag cactgagac cggctttgag aagccgaaga ttgtggcagtt	Homo sapiens

296	3927	Prostaglandin E Receptor EP4	NP_000949.1	MSTPGVNSSA SLSPDRLNSP VTIPAVMEIF GVVGNLVAIV VLCKSRKEQK ETTFTYTLVCG P LAVTDLLGTL LVSPVTIATY MKQWPFGQP LCEYSTFILL FFSLSGLSII CAMSVERLYA INHAYFYSHY VDKRLAGLTL FAVYASNVLF CALPNMGLGS SRLQYPTDTC FIDWTNVT HAAYSVMYAG FSSFLILATV LCNVLVCGAL LRMHRQFMRR VLSLGTQHHH AAAASVASRG HPAASPALPR LSDFERRRSF RRIAGAEIQM VILLIATSLV VLICSIPLVV RVFVNQLYQP SLEREVSKNP DLQAIRIASV NPILDPIWIY LLRKTVLSKA IEKIKLFCR IGGSRERSG QHCSDSQRTS SAMSGHSRSE ISRELKEISS TSQTLLPDLG LPDLSENLG GRNLLPGVPG MGLAQEDTTS LRTLRISETS DSSQGDSES VLLVDEAGGS GRAGPAPKGS SLQVTFPSET LNLSEKCI	Homo sapiens
297	3928	Prostaglandin F2-alpha Receptor	NM_000959	gacccctggg ggctcgtgag gctgcccagg gttggaggcg ggtccaggac atctgaggcg tgaccctggg ggctcgtgag gctgcccagg ctgctgccg ctgctgccg tacagaccca gccttgcaat ccaaggctgc gcaccgccag ccactatcat gtccactccc ggggtcaatt cgtccgccctc cttgagcccc gaccggctga acagccaggt gaccatccc gacatccc ggggtgatgt tcatcttcgg ggtggtgggc aacctggtg ccactggtg gctgtgcaag tgcgcaag agcagaagga gacgacctc tacagctgg tatgtgggt ggctgtcacc gactgttg gactttgtt ggtgagcccc gtgaccatcg ccacgtacat gaagggccaa tggccccggg gccagccgct gtcgagtag agcaccttca ttctgtctt acctggccat caaccatgcc tatttctaca gccactacgt cgccatgagt gtgagcgt acctggccat caaccatgcc tatttctaca gccactacgt ggacaagcga ttggcgggc tcacgtctt tcagctctat gctgctcag taccagaca cctggtgctt cgctgccc aacatgggtc tcgtagctc gcggtgca gcggtctac tctacatgt acggtgctt catgactgg accaccaag tgaaggcgca cgcgctct ctgcaacgtg ctgtgtgc ggcgtgct cagctcttc ctactctcg ccactgct ctgcaacgtg ctgtgtgc ggcgtgct ccgatgcac cgccagttca tgcgcgcac ctgctgggc accgagcgc accagcgc cgcgccgc tcggttgcct ccggggcca cccgctgc cgcgtgcg ggcgcgaga tccagatggt cagcgacttt cggcgccgc ggagcttcg cgcgtgcg ggcgtgcg ggcgcgaga tccagatggt catcttactc attgccact cctggtggt gctcatctg tccatcccgc tctggtgctg agtattctc aaccagttat atcagccaag ttggagcga gaagtcagta aaaaaccaga tttgaggcc atccgaattg ctctgtgaa cccatccta gacccctgga tatatact cctgagaaag acagtgtca gtaagcaat agagaagatc aatgctct tctgcccgt tgccgggtcc cgcaggagc gtcgcgaca gactgtca gacagtcaca ggacatctc tgccatgtca ggcactctc gctcttcat ctcggggag ctgaaggaga tcagcagtag atctcagacc ctctgccag acctctcact gccagacctc agtgaagatg gccttgagg caggaattg ctccagggt tgcctggcat gggcctggcc caggaagaca ccactcact gaggacttg cgaatatac agacctcaga ctcttcacag ggtcaggact cagagatgt cttactggtg gatgaggctg gtggagcgg cagggtggg cctgccccta aggggagctc cctgcaagtc acatttcca gtgaacact gaactatca gaaaaatga tataataggc aaggaaagaa atacagtact gttctggac cctataaaa tctgtgcaa tagacacata catgtcacat ttactgtgc tcagaaggc tatcatca	Homo sapiens
297	3928	Prostaglandin F2-alpha Receptor	NM_000959	ggcgccgggg gccatggcac accgagcggc tccgtcttct gctcctcaga gagcccggt A ggcgccctgg gatgacaaga tgcctggact gcaatccgc acagtttga gagggagatg acttgagtgg ttggctttta tctccacaac aatgtccatg acaatttcca aacagctagt	Homo sapiens

gtctcctgca gctgcgcttc tttaaacac aacctgcag acgaaaaacc ggcttccgt  
atTTTTtca gtaatcttca tgacagtgg aatcttgta aacagccttg ccatcgccat  
tctcatgaag gcatatcaga gatttagaca gaagtccaag gcatcgtttc tgcttttggc  
cagcggcctg gtaatcactg atttctttgg ccatctcacc aatggagcca tagcagtatt  
tgtatatgct tctgataaag aatggatccg ctttgacca tcaaatgtcc ttgcaagtat  
ttttgggtac tgcattggtt ttctgggtct gtgccactt cttctaggca gtgtgatggc  
cattgagcgg tgtattggag tcaaaaaacc aatatttcat tctacgaaaa ttacatccaa  
acatgtgaaa atgatgttaa gtggtgtgtg cttgtttgct gttttcatag ctttgcctgc  
catccttgga catcgagact ataaaaattca ggcgctgagg acctgggtgt ttacaacac  
agaagacatc aaagactggg aagatagatt ttatcttcta cttttttctt ttctggggct  
cttagccctt ggtgtttcat tgttgtgcaa tgcatacaca ggaattacac tttaagagt  
taaatTTaaa agtcagcagc acagacaagg cagatctcat catttggaat tggtaatcca  
gtcctggcg ataatgtgtg tctcctgtat ttgttgagg ccatttcttg ttacaatggc  
caacattgga ataaatggaa atcattctct ggaacctgt gaaacaacac ttttgcctc  
ccgaatggca acatggaatc aaatcttaga tcttgggta tatattcttc tacgaaaggc  
tgtccttaag aatctctata agcttgccag tcaatgctgt ggagtgcctg tcatcagctt  
acataatttg gagcttagtt ccattaaaaa ttccttaaa gttgctgcta ttctgagtc  
accagttgca gagaaatcag caagcaccta gcttaaatag acagtaaatc tgtgtggggc  
tagaacaataa attaagacat gtttggcaat atttcagtta gttaaatacc tgtagcctaa  
ctggaaaatt caggcttcat catgtagttt gaagatacta ttgtcagatt caggttttga  
aatttgtaa ataaacagga taactgtaca ttttcaactt gttttgcca atgggaggta  
gacacaataa ataatgcca tgggagtcac actgaaagca atttgagct tatctgtctt  
atttatgctt tgagtgaatc atctgttgag gtctaagcc tctacttggc ctatttgcca  
gagaacatct taatgcagcc tgcatagtga aatggttatt ttgagatcac cgctctgtag  
ctaaccctta taaactaggc tcagtaaaat aaagcactct tattttttga tctggcctat  
tttgccctc atgtgtgag ctcaattaac ccaggtctgg ccatgacacc cagaattcat  
gatggtttgt tataacaacc tctgcataat ccaggtctgg cagacagggtt gcctgacct  
gcaatcctat ctagaatggg ccatttcttg tcacatttga caaataggac tgcctacatt  
tattattatg aaggtcgatt gttgttgga gtgttttttc atgtcataga ttagcaattt  
tcaataaatt attttttctc tgaataattt gtgtgtgatt gcacaataaa taatttttag  
agaaacaaa gctctttctc agcacattga tgggcaacta gaattacagc agtttcaaac  
tctaccatgg ataatgcaa caaacgaaag ctacatgcca atgatagggtg caaagaatat  
tggcaaaaag tgctttacct tgagccatta ttgtgtctag agaacaaga aacagaatc  
aatatataaa ttcaaaagct atctgcagct agtgtgttct ttctttacac acatatacac  
acagacatca gaaaattctg ttgagagcag gtctattaaa ttgttaagat ggcatattct  
aaagcctgtg ctaccagtac taagaggga agactggcaa ttgtccaagc acttggggat  
tattataaca attaactagg agatcaagag ataataatct ctcccaaat ttccaataa  
taattgagac tttttcttgg cttgtttgtg taattcaacc aaagaattt caatcccat  
tcaaatgtc ctaggctctat cagaaattag ggaaggtagt cctgctttat aataggaaaa  
tgtatttctg tataagattt ctttgcttcc attaaaaatg ggattcattt aaaaattaat  
ctttccctgt taggtgatt tcagattctc taggaatct taggaagtaa ccagaagact



298	3928	Prostaglandin F2-alpha Receptor	NP_000950.1	MSMNSKQLV SPAAALLSNT TCQTENRLSV FFSVIFMTVG ILSNSLAIAI LMKAYQRFQ P	Homo sapiens
				ttcagatggt ttatttgctt tcagcagaga atttatttca tacagttaact taagagtgtt gatgtcttgt gaacagagat ataaggaacc attctccatc cttccttattc atgctgggta caatgcttct atgaatattt ccatgtattt tgactgggga gaggcattga gaagaaactc tcattcaggg gctccaggat ccttctcctt gaggtctcta aataaatggc agaattcttg ctgtattgcc atgatgtcac cctggccatg tgtactgact tgaggagatc ttgcaacatg gccatgtgca aggcctttaag gactgagaga gatgtgtaca tatcttagga gggttatcta tgttatctga gtatatgtt gggtaaccaa attgggtcta aaatgatgt taaccaaga agtagacatc aaaaattaaa aaaaaaaaa aaaa	
299	4051	Proteinase-Activated Receptor 2	NM_005242	cgccccgcc tggggaggcg cgcagcagag gctccgattc ggggcaggtg agaggctgac A tttctctcgg tgcgtccagt ggagctctga gtttcgaatc ggtggcgcg gatccccgc gcgccccggc tcggggcttc caggaggatg cggagcccca gcgcggcggt gctgctgggg gcgcacatcc tgctagcgc ctctctctcc tgcagtggca ccatccaagg aaccaataga tcctctaaag gaagaagcct tattggtaag gttgatggca catcccacgt cactggaaaa ggagtacag ttgaaacagt ctttctctg gatgagttt ctgcatctgt cctcactgga aaactgacca cggctcttct tccaattgtc tacacaattg tgttctggt gggtttgcca agtaacggca tggccctgtg ggtcttctt ttcgaacta agaagaagca cctgctgtg atttacatgg ccaatctggc cttggctgac ctctctctg tcactctgtt cccttgaag attgctatc acatacatg caacaactgg atttatggg aagctctttg taatgtgctt attggctttt tctatggcaa catgtactgt tccattctct tcacacatg cctcagtggt cagaggtatt gggctacgt gaacccatg gggcactcca ggaagaaggc aaacattgcc attggcatct cctggcaat atggctgtg attctgtg tccacatccc ttgtatgtc gtgaagcaga ccatcttcat tctgcccgt aacatcacga cctgtcatga tgttttgct gagcagctct tggtaggaga catgttcaat tacttctct ccttggccat tgggtcttt ctgttccag ccttctcac agcctctgcc tatgtgtga tgatcagaat gctgcgatct ctgtccatgg atgaaactc agagaagaaa aggaagaggg ccatcaaat cattgtcact gtcctggcca tgtacctgt ctgcttcat cctagtaacc ttctgctgt ggtgcattat tttctgatta agagccaggg ccagagccat gctatgccc tgtacattgt agccctctgc ctctctaccc ttaacagctg catcgacccc tttgtctatt actttgttt acatgatttc agggatcatg caaagaacgc tctcctttgc cgaagtgtcc gactgtaaa cagatgcaa gtatccctca cctcaagaa acactccagg aaatccagct ctactcttc aagttcaacc actgttaaga cctcctattg agttttccag gtcctcagat gggaattgca cagtaggatg tggaacctgt ttaatgttat gaggacgtgt ctgttatttc ctaatcaaaa aggtctcacc acataccacc g	Homo sapiens
300	4051	Proteinase-Activated Receptor 2	NP_005233.2	MRSPSAWLL GAAILLAASL SCSGTIQGTN RSSKGRSLIG KVDGTSHTVG KGVTVEVFS P VDEFSASVLT GKLTIVFLPI VYTIVFVGL PSNGMALWVF LFRTKKKHPA VIYMANLALA	Homo sapiens

[illegible]

303	4090	G Protein- Coupled Receptor GPR17	NM_005291	KASLLILVIF TICFAPSNI I LIIHHANYYY NNTDGLYFIY LIALCLGSLN SCLDPFLYFL MSKTRNHSTA YLTK	ccgcacacca cgggcgagaga tcaactgctg cccgcagag cctgtccct tctcccga A ccagcagcta gaggatgtcc aaacggagtt ggtgggctgg atccagaaag ccccaagag agatgctgaa actctcaggc tctgactcca gccaaagcat gaatggcctt gaagtggctc cccaggctt gataccaac ttctccctgg ccacggcaga gcaatgtggc caggagacgc cactggagaa catgctgttc gctctcttct accttctgga ttttatactg gctttagttg gcaataacct ggctctgtgg cttttcatcc gagaccacaa gtccgggacc ccggccaacg tgttctctgat gcatctggcc gtggccgact tgtcgtgctg gctggctctg cccacccgcc tgttctacca cttctctggg aaccactggc catttgggga aatcgcatgc cgtctcaccg gttctctctt ctacctcaac atgtacgcca gcatctactt cctcacctgc atcagcgccg accgtttcct ggccattgtg caccgggtca agtccctcaa gtcocgcagg cccctctacg cacacctggc ctgtgccttc ctgtgggtgg tgggtgctgt ggccatggcc cgcgtgctgg tgagccaca gaccgtgcag accaaccaca cgggtgcttg cctgcagctg taccgggaga aggctccca ccatgcccctg gtgtccctgg cagtggcctt cacctcccg ttcatacca cggtcacctg ctacctgctg atcatccgca gcctgggca gggcctgcgt gtggagaagc gcctcaagac caaggcagtg cgcatactg ccatagtgct ggcatcttc ctggtctgct tcgtgcccta ccacgtcaac cgctccgtct acgtgctgca ctaccgcag catggggcct cctggccac ccagcgcatc ctggccctgg caaacgcac cactcctgc ctaccagcc tcaacggggc actcgacccc atcatgtatt tcttcgtggc tgagaagttc cgccacgccc tgtgcaactt gctctgtggc aaaaggctca agggcccgcc cccagcttc gaaggga ccaacgagag ctgctgagtg gccagtcag agctgtgagc ggggggccc gtccaggccg agcgagact gtttaggact cagcagaccc agcaagaggc atctgcccct tcccagcca cctcccccag aagcaacctg aaatctcagc agatgcccac catttctta gatcgctag tctcaaccca taaaaaggaa gaactgacaa aggggatcca tggccaccc ctctgcaggg gcttctgatg gctacaatgg ctcttagaca ctcaacgact tcactgttg caggagaga ggaggccgga agaacaaccc ctgaacaatg gaggccttct ttcccgccta ggtcccagc ctccttccc ctacagaatc gctcctcggc gaggtcagc agaaagacc tgaaggcagg ctgcaaatga ccagagaag ggacctggga gtccctgttg ggacggggag ggagtctcaa tactcctttg cagcgcaagg tactctgagt cccctctgta gtgcctctgc cagacacaca ctgcttgagt tgaagagaca caggccacac atttcaggct gttggcagc ggagctcagc actcacggcc tgcggggact cagcacagct ctggattctg gatctctct gctgtaaccc cacgcacaag cctgcaaccc ccagagctct ttgacagct cccaggcctc ccagtcctgg acaagcatgt gcagtcacgg gagctcagct caggccagg ctgggctgtg cacctgcctc ccactgacc agaccactt cctccagaga ggctctctc cgcctgagct atttccctg ctagtgtgca gatatttccc taacatgtcc tttttgtat ttgtttgtac ggaccataaa tataactgta gctttaagac taaaaaaa	Homo sapiens
304	4090	G Protein- Coupled Receptor GPR17	NP_005282.1	MSKRSWAGS RKPPREMLKL SGSDSSQSMN GLEVAPPGLI TNFSLATAEQ CGQETPLENM P LFASFYLLDF ILALVGNFLA LWFIRDHKS GTPANVFLMH LAVADLSCVL VLPRLVYHF SGNHWFEI ACRLTGFEFY LNMYSIYFL TCISADRFIA IVHPVKSLKL RRLYAHAC AFLWVVAVA MAPLLVSPQT VQTNHTVVCL QLYREKASHH ALVSLAVAF FPFITVTICY	Homo sapiens	

305	4254	Rhodopsin	NM_000539	LSAKSEL	<p> LLIIRSLRQG LRVEKRLKTK AVRMIIVLA IFLVCFVPYH VNRVYVLHY RSHGASCATQ  RILALANRIT SCLTSLNGAL DPIMYFFVAE KFRHALCNLL CGKRLKGPPP SFEKKTNESS  LSAKSEL  agagtcaccc agctggagcc ctgagtggct gagctcagcc cttcgcagca ttcttgggtg A  ggagcagcca cgggtcagcc acaagggcc aagccatgaa tggcacagaa ggcctaact  tctacgtgcc ctctccaat ggcacgggtg tggtaacgag ccccttcgag taccacagt  actacctggc tgagccatgg cagtctcca tgctggcgc ctacatgtt ctgctgatcg  tgctgggctt ccccatcaac ttctcacgc tctacgtcac cgtccagcac aagaagctgc  gcacgcctct caactacatc ctgctcaacc tagccgtggc tgacctcttc atggtcctag  tggtcttcac cagcaccttc tacacctctc tgcattgata ctctgtcttc gggccacacg  gatgcaattt ggagggttc ttggccacc ttggcgggtga aattggcctg tggctcctgg  tggtcctggc catcgagcgg tacgtgggtg tgtgtaagcc catgagcaac ttccgcttcg  gggagaacca tgccatcatg ggcgttgct tcaactgggt catggcgtg gctgcgcgcg  caccacct cgcgggtg tccaggtaca tccccaggg cctgcagtc tctgttgaa  tcgactacta cagctcaag cggaggtca acaacgagtc ttctgtcatc tacatgttcg  tggtccactt caccatcccc atgattatca tcttttctg ctatggcag ctgctctca  ccgtcaagga ggcgctgccc cagcagcagg agtcagccac cacacagaag gcagagaagg  aggtcacccc catggtcctc atcatggtca tgccttctc gatctgtgg gtgcctacg  ccagcgtggc attctacatc ttaccacc accaggtccaa cctcggctcc atctcatga  ccatccagc gttctttgccc aagagcgccg ccacttcaaa cctgtctatc tatatcatga  tgaacaagca gtcccggaac tgcattgctca caccatctg ctgcggcaag aaccactgg  gtgacgatga ggcctctgct accgtgtcca agacggagac gagccaggtg gcccggcct  aagacctgcc taggactctg tggcggacta taggcgtctc ccatccctca cacttcccc  cagccacagc catcccacca ggagcagcgc ctgtgcagaa tgaacgaagt cacataggct  ccttaatttt ttttttttt ttaagaaata attaatgagg ctcctcactc acctgggaca  gcctgagaag ggacatccac caagacctac tgatctggag tcccacgttc ccaaggcca  gcgggatgtg tgccctcctc cctcccaact catctttcag gaacacgagg attctgtctt  tctggaaaaa tgctccagct tagggataag tgtctagcac agaattggg acacagtagg  tgcttaataa atgctggatg gatgcaggaa ggaattggagg aatgaatggg aaggagaaac  atatctatcc tctcagaccc tgcagcagc agcaactcat acttggctaa tgatatggag  cagttgtttt tccctccctg ggcctcactt tcttctcta taaaatggaa atccagatc  cctggtcctg ccgacacgca gctactgaga agacaaaag aggtgtgtgt gtgtctatgt  gtgtgtttca gcactttgta aatagcaaga agctgtacag attctagtt atgttgtgaa  taacatcaat taatgtaact agttaattac tatgattatc acctctgat agtgaacatt  ttgagattgg gcattcagat gatggggttt caccacaact tggggcaggt ttttaaaat  tagctaggca tcaaggccag accagggtg ggggttgggc tgtaggcagg gcagtcaca  ggaatgcagg atgcagtcac cagacctgaa aaaacaacac tgggggaggg ggaagggtgaa  ggccaagtcc ccaatgaggg tgagattggg cctggggtct caccctagt tgggggcccc  aggtcccggt cctccccctc ccaatgtggc ctatggagag acaggccttt ctctcagcct  ctggaagcca cctgctcttt tgctctagca cctgggtccc agcatctaga gcattggagcc  tctagaagcc atgctcacc gccacattt aattaacagc tgagtccctg atgtcatcct </p>	Homo sapiens
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306	4254	Rhodopsin	NP_000530.1	<p>tactcgaaga gcttagaagc aaagagtggt aaattccact ggccctacct tccttgggga  tggtcatggg cccagtttc cagtttccct tgccagacaa gcccatcttc agcagttgct  agtcattctt ccattctgga gaatctgtc caaaaagctg gccacatctc tgagggtgtca  gaattaagct gcctcagtaa ctgtccccc ctctccatat aagcaaaagc agaagctcta  gctttaccca gctctgctg gagactaag caaattgggc cattaaaagc tcagctccta  tggtggtatt aacggtggtg ggtttgttg ctttcacact ctatccacag gatagattga  aactgccagc ttccacctga tccctgaccc tgggatggct ggattgagca atgagcagag  ccaagcagca cagagtcccc tggggctaga ggtggaggag gcagtctctg gaatgggaaa  aacccca</p>	Homo sapiens
307	4284	Retinal G Protein-Coupled Receptor RPE	NM_002921	<p>VPFSNATGVV RSPFEYPOYY LAEPWQFSL AAYMELLIVL GFPINFLTLY P  VTVQHKKLR PLNYILLNLA VADLFMVLGG FTSILYTSLSH GYFVFGPTGC NLEGGFFATLG  GEIALWSLIV LAIERVYVVC KPMNSERFGE NHAIMGVAFI WMALACAAP PLAGWSRYIP  EGLQSCGID YYTLKPEVNN ESFVIYMFV HFTIPMIIF FCYQLVFTV KEAAAQQQES  ATTQAEKEV TRVVIIMVIA FLICWVPYAS VAFYIFTHQG SNFGPIEMTI PAFFAKSAAI  YNPVIYIMN KQFRNCMLTT ICCGKNPLGD DEASATVSKT ETSQVAPA</p>	Homo sapiens
308	4284	Retinal G Protein-	NP_002912.1	<p>acttacaagt gagaacatgt ggtatttgac ttcca  MAETSALPTG FGELEVLAVG MVLLVEALSG LSLNLTIFS FCKTPELRTP CHLLVLSLAL P  ADSGISLNAL VAATSSLLRR WPGSDGCGQA HGFGGFVTAL ASICSSAAIA WGRYHHYCTR</p>	Homo sapiens

309	4321	Coupled Receptor RPE	Secretin Receptor	NM_002980	SQLAWN SAVS LVLFWLSSA FWAALPLL GW GHYDYEPLGT CCTLDYSKGD RNFTSFLFTM	Homo sapiens
					SFFNFAMPLF ITITSYSLME QKLGKSGHLQ VNTTLPARTL LLGWGPYAIL YLYAVIADVT	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	SISPKIQMVP ALIAKMVPTI NAINYALGNE MVCRIWQCL SPQKREKDRIT K	Homo sapiens
					agcaggccgg ccggagcccg ggaccctgcg cggggcgctg agctcccgag cgggcagagg A	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	gcacgggacg gcggacgtcg gggcgccctc ggggaacgtg cgggcaccat gcgtcccccac	Homo sapiens
					ctgtcgccgc cgctgcagca gctactactg ccggtgctgc tcgcctgcgc cgcgcactcg	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	actggagccc ttccccgact atgtgacgtg ctacaagtgc tgtgggaaga gcaagaccag	Homo sapiens
					tgcctgcagg aactctccag agagcagaca ggagacctgg gcacggagca gccagtgcc	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	ggttgtgagg ggtgtggga caacataaag tgcctggcct cttctgtgcc gggccggatg	Homo sapiens
					gtggaggtgg aatgccccgag attcctccgg atgtccacca gcagaaatgg ttccttgctc	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	cgaaactgca cacaggatgg ctggtcagaa accctcccca ggcctaactt ggcctgtggc	Homo sapiens
					gttaaatgta acgactcttc caacgagaag cggcactcct acctgtgaa gctgaaaagtc	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	atgtacaccc tgggctacag ctctccctcg gtcattgctc tggcgcctt tggcattcctc	Homo sapiens
					tgtgctttcc ggaggctcca ctgcactcgc aactacatcc acatgcacct gtctgtgtcc	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	ttcatccttc gtgcctgtc caacttcac aaggacgccc tgctcttctc ctcaagatgat	Homo sapiens
					gtcaactact gcgatccgca caggcgggc tgaagctgg tcatggtgct gtccagttac	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	tgcattcatg ccaactactc ctggctgctg tgggaaggcc tctacctca cacactcctc	Homo sapiens
					gccattcctc tcttctctga aagaaagtac ctccagggat ttgtggcatt cggatgggggt	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	tctccagcca tttttgttgc tttgtgggtc attgccagac attttctgga agatgttggg	Homo sapiens
					tgtctgggaca tcaatgccaa cgcattccatc tggtagatca ttcgtgtgctc tgtgattcctc	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	tccattctga ttaatttcat ccttttcata aacattctaa gaatcctgat gagaaaaactt	Homo sapiens
					agaacccaag aaacaagagg aaatgaagtc agccattata agcgcctggc caggtccact	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	ctcctgctga tccccctctt tggcatccac tacatgctct tcgccttctc ccagagaggac	Homo sapiens
					gctatggaga tccagctgtt ttttgaacta gccctgggct cattccaggg actggtgggtg	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	gccgtcctct actgcttctt caatggggag gtgcagctgg aggttcagaa gaagtggcag	Homo sapiens
					caatggcacc tccgtgagtt cccactgcac cccgtggcct ccttcagcaa cagcaccaag	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	gccagccact tggagcagag ccagggcacc tgcaggacca gcatcatctg agaggctgga	Homo sapiens
					gcagggtcac ccacggacag agaccaagag aggtcctgag aggctgggc actgctgtgg	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	gacagccagt ctccccagca gacacctgt gtctctcttc agctgaagat gccctcccc	Homo sapiens
					aggccttgga ctcttccgaa ggatgtgag gcactgtggg gcaggacaa ggcctgggat	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	ttggttcgtt tgctcttctg ggaagagaag ttcagggggtc ccagaaagg acagggaaat	Homo sapiens
					aaatggtgcc tgggatgaga ttc	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	MRPHLSPPILQ QLLLPVLLAC AAHSTGALPR LCDVLQVIME EQDQCLQELS REQTGDLGTE P	Homo sapiens
					QVPVGCCEGMW DNISWPSV PGRMVEVECP RFLRLMTSRN GSLFRNCTQD GWSETFPRPN	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	LACGVNND SNEKRHSYLL KLVMTYTVGY SSSLVMLLVA LGILCAFRRL HCTRNYIHMH	Homo sapiens
					LFVSFILRAL SNFIKDAVLF SSDVTYCDP HRAGCKLV MV LFQYICIMANY SWLLVEGLYL	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	HTLLAISFFS ERKYLQGFVA FGWGSPIFV ALWAIARHFL EDVGCWDINA NASIWIIRG	Homo sapiens
					PVILSILINF ILFINILRIL MRKLRTQETR GNEVSHYKRL ARSTLLLIPL FGIHYIVFAF	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	SPEDAMEIQL FFELALGSFQ GLVVAVLYCF LINGEVQLEVO KKWQOWHLRE FPLHPVASFS	Homo sapiens
					NSTKASHLEQ SQTCRTSII	

311	4480	Somatostatin NM_001049 Receptor Type 1	atgttcccca atggcaccgc ctctctctct tcctctctctc ctagcccccag cccggggcagc A tgcggcgaag gcggcgccag cagggggccc cagggccggcg ggggcccgcg ctgcggacgg catggaggag ccaggcgaa atgcgtccca gaacgggacc ttgagcgagg gccagggcag cggccatcctg atctctttca tctactccgt ggtgtgcctg gtggggctgt ttgggaactc tatggtcatc tacgtgatcc tgcgctatgc caagatgaag acggccacca acatctacat cctaaatctg gccattgctg atgagctgct catgctcagc gtgcccctcc tagtcacctc cagttgtgtg cgccactggc ccttcggtgc gctgctctgc cgctctgctg tcagcgtgga cgcggtcaac atgttcacca gcattactg tctgactgtg ctacgctggt accgctacgt ggcggtggtg catcccatca aggcggcccg ctaccgcccg cccaccgtgg ccaaggtagt aaacctgggc gtgtgggtgc tctgctgct cgtcactctg cccatctctg tcttctctg caccgcgcc aacagcgacg gcacgggtggc ttgcaacatg ctcatgccag agcccgtca acgtggctg gtgggcttcg tgtgtacac atttctcatg gcttctctgc tgcctgtgg ggctatctgc ctgtgctacg tgcctcatc tgctaagatg cgcctggtgg cctcaaggc cgcctggcag cagcgcaagc gctcggagcg caagatcacc ttaatggtga tgaatggtt gatggtgtt gtcatctgct ggatgcttt ctacgtggtg cagctgggtta acgtgtttgc tgaagcaggac gacgccaagg tgaatcagct gtcggtcatc ctggtctatg ccaacagctg cgccaacccc atcctctatg gcttctctc agacaacttc aagcgtctt tccaaacgcat cctatgcctc agctggatgg acaacggcg gcaggagccg gttgactatt agccacccg gctcaagagc cgtgcctaca gtgtggaaga cttccaacct gagaacctgg agtcggcgcg cgtcttccgt aatggcaact gcacgtccc gatacagcgc ctctga 512	312	4480	Somatostatin NP_001040.1 Receptor Type 1	MFPPNGTASP SSSPSPSPGS CEGGSGRGP GAGAADGMEE PGRNASQNGT LSEGGQSAIL P ISFIYSVVCL VGLCGNSMVI YVILRYAKMK TATNIYILNL AIADLLMLS VPFLVTSTLL RHWPFGLLC RLVLSDAVN MFTSIYCLTV LSVDRYVAVV HPIKAARYRR PTVAKVNVNLG VWVLSLLVIL PIVFSRTAA NSDGTACNM LMPEPAQRWL VGFLVYTFILM GFLLPVGAIC LCYVLIIAKM RMVALKAGWQ QRRRSERKIT LMVMVMVMVF VICWMPFYVW QLVNVFAEQD DATVSQLSVI LGYANSCANP ILYGFLSDNF KRSSFQRI LCL SWMDNAAEEP VDYATALKS RAYSVDFQP ENLESGGVER NGTCTSRITT L atggacatgg cggatgagcc actcaatgga agccacacat ggctatccat tccatttgac A ctcaatggct ctgtggtgtc aaccaacacc tcaaacacaga cagagccgta ctatgacctg acaagcaatg cagtcctcac attcatctat tttgtggtct gcatcattgg gttgtgtggc aacacacttg tcaattatgt catcctccgc tatgccaaga tgaagacctt cacaacatt tacatctca acctggccat cgcagatgag ctcttcacg tgggtctgct tttcttggt atgcaggtgg ctctggcca ctggcccttt ggcaaggcca ttgcccgggt ggtcatgact gtggatggca tcaatcagtt caccagcatc tctgctctga cagtcatgag catcgaccga tacctggctg tgggtccacc catcaagtcg gccaaagtga ggagacccc gagggccaaag atgatcacca tggctgtgtg gggagtctct ctgctgtgca tcttgcccat catgatata gctgggctcc ggagcaacca gtgggggaga agcagctgca ccatcaactg gccaggtgaa tctggggctt ggtacacagg gttcatcatc tacactttca tctgggggtt cctgggtacc ctcaccatca tctgtctttg ctacctgttc attatcatca aggtgaagtc ctctggaatc cgagtgggct cctctaagag gaagaagtct gagaagaagg tcaccggaat ggtgtccatc gtgggtggct tcttcatctt ctgctggctt ccttcttaca tattcaactg tcttccgtc	Homo sapiens	Homo sapiens
313	4481	Somatostatin NM_001050 Receptor Type 2			Homo sapiens	Homo sapiens			

314	4481	Somatostatin NP_001041.1 Receptor Type 2	tccatggcca tcagccccc cccagccctt aaagggcatgt ttgactttgt ggtggtcctc acctatgcta acagctgtgc caaccctatc ctatatgcct tcttgctga caacttcaag aagagcttcc agaattgctt ctgcttggtc aagtgagcg gcacagatga tggggagcgg agtacagta agcaggacaa atcccggtg aatgagacca cggagaccca gaggacccctc ctcaatggag acctccaaac cagtattga MDMADEPLNG SHTWLSIPFD LNSVWSTNT SNOTEPYYDL TSNVLTFIY FWCIIIGLGG P NTLVIYILR YAKMKTITNI YILNLAIAD LFMLGLPFLA MQVALVHWPF GKAIQVWMT VDGINQFTSI FCLTMSIDR YLAVVHPIS AKWRRPTAK MITMAVWGS LLVILPIMIY AGLSNQWGR SSCTINWPG SGAWYTGFI YFIFLGLVLP LTIICLCYLE IILKVSSGI RVGSSKRKS EKKVTRMSI VVAVFIFCWL PFYIFNVSSV SMAISPTPAL KGMFDFVVL TYANSCANPI LYAFLSDNEF KSFQNVLCV KVSCTDDGER SDSKQDKSRL NETTETQRTL LNGDLQTSI	Homo sapiens
315	4482	Somatostatin NM_001051 Receptor Type 3	atggacatgc ttcatccatc atcgggtgtcc acgacctcag aacctgagaa tgctcctcgc A gcctggcccc cagatgccac cctgggcaac gtgtcggcgg gcccaagccc ggcaggcgtg gccgtcagtg gcgttctgat cccctggtc tacctggtg tgcgtgtgt ggcctgctg ggtaactcgc tggatcata tgggtcctg cggcacacgg ccagcccttc agtcaccaac gtctacatcc tcaacctggc gctggccgac gagcttcca tctggtggct gcccttctg gccgccaga acgcccgtc ctactggccc ttgggtccc tcatgtgcc cctggtcatg gcgtgtgatg gcataacca gttcaccagc atatttgc ttgactgtcat gagcgtggac cgctacctgg ccgtggata tcccaccgc tcggcccgct ggcgcacagc tccggtggcc cgacagtgca gcgcggctgt gtgggtggcc tcagccgtg tgggtgtgc cgtggtgtc ttctcgggag tgccccggc catgagacc tgcacatgc agtgccca gccggcggcg gcctggcgag ccggcttcat catctacac gccgcacitg gcttcttcgg gccgtgctg gtcatctgcc tctgtacct gctcatcgt gtgaagtg gctcagctg gcgcgggtg tgggcaccct cgtgccagc gcgcggcgc tccgaacgca ggtcacgc catggtgtg gccgtgtgg cgctcttct gctctgctg atgcccttct acgtgctcaa catgctcaac gtggtgtgcc cactgcccc gtagcctgcc ttctttggc tctacttct ggtggtggcg ctgccctatg ccaacagctg tgccaacccc atcctttatg gcttctctc ctaccgttc aagcagggt tccgcagggt cctgctgcgg ccctcccgcc gtgtgcgag ccaggagccc actgtgggc ccccgagaa gactgaggag gaggatgagg aggagagga tgggagagg agcagggagg ggggcaagg gaaggagatg aacggccgg tcagccagat cagcagcct ggcaccagc ggcaggagc gccgccagc agagtggcca gcaaggagca gcagctcta ccccaaagg cttccactg ggagaagtc agcacatgc gcacagcta ccttag MDMLHPSVS TTSEPENASS AWPEDATLGN VSAGSPAGL AVSGLIPLV YLVVCVGLL P GNSLVIYVVL RHTASPSVTN VYIINLALAD ELFMLGLPFL AAQNALSYWP FGSIMCRLLM AVDGINQFTS IFCLTMSVD RYLAVVHPT R SARWRTAPVA RTVSAVWVA SAVVLPVV FSGVPRGMST CHMOWPEPAA AWRAGFIYT AALGFFGLL VICLCYLLIV VKRSAGRRV WAPSCQRRR SERRVTRMV AVVALFVLCW MPFYVLIN VVCPLEPEA FFGLYFLVA LPYANSCANP ILYGFLSYRF KQFRVLLR PSRRVRSQEP TVGPPEKTEE EDEEEDGEE SREGGKGKEM NGRVSQITQP GTSGQERPPS RVASKEQQLL PQEASTGEKS STMIRISYL	Homo sapiens
316	4482	Somatostatin NP_001042.1 Receptor Type 3		Homo sapiens



317	4483	Somatostatin NM_001052 Receptor Type 4	atgagcgccc cctcgacgct gcccccggg ggcgaggaag ggctggggac ggcctggccc A tctgcagcca atgccagtag cgctccggcg gaggcgagg aggcgtggc ggggccccggg gacgcgggg cgcggggcat ggtcgctatc cagtgcattc acgcgtggt gtgacctggtg gggtgggtgg gaaacgacct ggtcatcttc gtgacccaa gctacgcaa gatgaagacg gtaccacca tctacctgct caacctggcc gtgacgacg agctcttcat gctgagcgtg ccctcggtg cctcgctggc cgccctggcg cactggccct tcgggtccgt gctgtggcgc gcgtgtctca gcgtcgacg cctcaacatg ttcaccagc tctctgtct caccgtgctc agcgtggacc gctacgtggc cgtggtgac cctctggcg cgcgaccta cggcgggccc agcgtggcca agctcatcaa cctggcggtg tggctggcat ccctgttggc cactctccc atcgccatct tcgcagacac cagaccggct cgcgcgggc aggcgtggc ctgcaacctg cagtgggcac accggcctg gtcggcagtc ttgctggctt acacttctt gctgggcttc ctgctgcccg tgcgtggcat tggcctgtgc tactgtctca tcgtgggcaa gatgcgccc gtggccctgc gcgtggctg gcagcagcg agcgctcgg agaagaaat caccaggctg gtgctgatgg tgcgtgctg ctttgtgctc tgcgtgagtc ctttctact ggtgcagctg ctgaacctcg tgcgtgacag ccttgatgcc accgtcaacc acgtgtccct taccctcagc tatgccaaca gctgcgcaa cctattctc tatggcttcc tctcgacaa cttccgcccga tccttcagc ggttctctg cctgcgtgc tgcctcctgg aagtgctgg agtgctgag gaggagcccc tggactacta tgcactgct ctcaagagca aagtggggc aggtgcatg tgccccccac taaatgcca gcaggaagcc ctgcaaccag aaccggccc caagcgcac ccctcacca ggaccaccac cttctga	Homo sapiens
318	4483	Somatostatin NP_001043.1 Receptor Type 4	GLVGNALVIF VILRYAKMKT ATTIIYLLNLA VADELFMISV PFVASSAALR HWPFGSVLCR P AVLSVDGLNM FTSVFCITVL SVDRYVAVVH PLRAATYRRP SVAKLINLGV WLASLLVTLP IAIFADTRPA RGGQAVACNL QWPHPAWSAV FVYTFLLGF LLPVLAIGLC YLLIVGKMRA VALRAGWQQR RRSEKKITRL VLMVVVVFVL CWNPFYVQL LNLVVTSLDA TNHVSLLIS YANSCANPIL YGFLSDNFRF SFQVLCRLC CLLEGAGGAE EEPLDYYATA LKSKGGAGCM CPPLKQQEA LQPEGRKRI PLRRTTF	Homo sapiens
319	4484	Somatostatin NM_001053 Receptor Type 5	atggagcccc tgttcccagc ctcacgccc agctggaacg cctcctccc gggggctgcc A tctggaggcg gtgacaacag gacgtggtg gggccggcg cctcggcagg gggccggcg gtgctggtgc cgtgctgta cctgctggtg tbtgcggcg gctggggcg gaacacgctg gtcatctacg tgggtgctgc cttcgccaag atgaagaccg tcaccaacat ctacattctc aacctggcag tggcgacgt cctgtacatg ctggggctgc cttcctggc cagcagaac gcccgtcct tctggccctt cggcccgctc ctgtgcgccc tggctcatgac gctggacggc gtcaaccagt tcaccagtgt cttctgcctg acagtcata gctggaccg ctacctggca gtggtgcacc cgctgagctc gggccgctgg cgcgccccg cgttgggcaa gctggcgagc gcccggcctt ggttctgtc tctgtgcatg tcgctgcccg tctgtgtgtt cgcggacgtg caggagggcg gtacctgcaa cggcagctgg cggagcccc tggggctgtg gggcgccgtc ttcatcatct acacggcgt gctgggcttc ttcgcccgc tgcgtgtcat ctgctgtgc tacctgtca tgcgtgtgaa ggtgagggcg gcgggctgc cgtgggctg cgtgcggcg cgctcgagc ggaagtgac gcgcatggtg ttggtggtg tgctggtgtt tgcgggatgt tggctgccct tcttcaccgt caacatcgtc aacctggccg tggcgctgcc ccaggagccc	Homo sapiens

320	4484	Somatostatin NP_001044.1 Receptor Type 5	MEPLFPASTP SWNASSPGAA SGGDNRTL V GPAPSAGARA VLVPVLYL V CAAGLGNTL P VIYVLRFAK MKTVTNIYIL NLAADVLYM LGLPFLATQN AASFWPFGPV LCRILVMTLDG VNQFTSVFCL TVMSVDRYLA VVHPLSSARW RRPRVAKLAS AAAWLSLCM SLPLLVFADV QEGGTCNASW PEPVGLWGA VFIYTAVLGF FAPLLVLC L YLLIVVKVRA AGVRVGCVR R RSERKVT R MV LVVVLVFA G WLPEFTVNI V NLAVALPQEP ASAGLYFFV V ILSYANSCAN PVLVGLSDN FRQSFQKVL C LRKSGAKDA DATEPRPDRI RQQEATPPA HRAAANGLMQ TSKL	Homo sapiens
321	4552	Tachykinin Receptor 1	aattcagagc caccgcgggc aggcgggcag tgcattccaga agcgtttata ttctgagcgc A cagttcagct ttcaaaaaga gtgctgccc aaaaaagcct tccaccctcc tgctgcttt agaaggaccc tgagcccccag gcgccagcca caggactctg ctgcagaggg ggttggtgta cagatagtag gctttacgcc tagcttcgaa atggataaacg tctcccgggt ggactcagac ctctccccc aacatctccac taacacctcg gaaccaatc agttcgtgca accagcctgg caaatgtgcc ttggggcagc tgctacacg gtcatgtgg tgacctctgt ggtggggaac gtgtagtga tgtggatcat cttagccac aaaaagaatga ggacagtgc gaactatttt ctggtgaacc tggccttcgc ggagccctcc atggctgcac tcaatacagt ggtgaacttc acctatgctg tccacaacga atggtactac ggcctgttct actgcaagtt ccacaacttc tttcccatcg ccgctgtctt cgccagtac tactccatga cggctgtggc ctttgatagg tacctggcca tcatacatcc cctccagccc cggctgtcag ccacagccc caaagtggtc atctgtgtca tctgggtcct ggctctcctg ctggccttcc ccagggcta ctactcaacc acagagacca tgcccagcag agtcgtgtgc atgatcgaat gccagagca tccgaacaag atttatgaga aagtgtacca catctgtgtg actgtgtgga tctacttct cccctgctg gtgattggct atgcatacac cgtagtggga atcacactat gggccagtga gatccccggg gactcctctg accgctacca cgagcaagtc tctgccaa gcaaggtggt caaaatgatg attgtcgtgg tgtgcacctt cgccatctgc tggctgcct tccacatctt ctctcctg ccctacatca acccagatct ctacctgaag aagtttatcc agcaggtcta cctggccatc atgtggctgg ccatgagctc caccatgtac aaccccatca tctactgctg cctcaatgac aggttccgctc tgggcttcaa gcatgccttc cgggtgctgc ccttcatcag cgcgggcgac tatgaggggc tggaaatgaa atccaccgg tatctccaga cccagggcag tgtgtacaaa gtcagccgcc tggagaccac catctccaca gtggtggggg cccacgagga ggagccagag gacggcccca aggccacacc ctgctccctg gacctgaact ccaactgctc ttcacgaagt gactccaaga ccatgacaga gagcttcagc ttctctcca atgtgctctc ctaggccaca gggcttttgg caggtgcagc ccccatgccc tttagactgc ctcccttcac gcatggaaat tcccttcac tggaaaccatc agaaacaccc tcacactggg acttgcaaaa agggtcagta tgggttaggg aaaacattcc atccttgagt caaaaaatct caattcttcc ctatctttgc caccctcatg ctgtgtgact caaaccaaat cactgaactt tgctgagcct gtaaaaataa agtcgggacc agcttttctt caagagcccc atgcattcca ttcttggaag tgactttggc	Homo sapiens

322	4552	Tachykinin Receptor 1	NP_001049.1	tgcatgcgag tgctcattc aggatg	MDNVLPLVDS LSPNISTNTS EPNQFVQPAW QIVLWAAAYT VIVTSVUGN VVVMWIIIAH P KRMRTVTNYF LVNLAFAEAS MAAFTVWNE TYAVHNEWY GLFYCKFHFNF FPIAAVFAFI YSMTAVAFDR YMAIIHPLQ RLSATATKV TVLIYFLPLL VIGYAYTVVG ITLWASEIPG DSSDRYHEQV MIEWPEHPNK IYEKVYHICV TVLIYFLPLL WLPFHIFLL PYINPDLYLK KFIQQVYLAI MWLAMSSTMY SAKRKVVKMM IVVCTFAIC WLPFHIFLL RCCPFISAGD YEGLEMKSTR YLQTQGSVYK VSRLETTIST NP1IYCCLND RFRLGFKHAF RCCPFISAGD YEGLEMKSTR YLQTQGSVYK VSRLETTIST VVGAAHEEPE DGPKATPSSL DLTSNCSSRS DSKTMTESFS FSSNVLS	Homo sapiens
323	4687	Thrombin Receptor	NM_001992	gpgcgggggc gcacagagcc agaggggctt gcgagcggc gctgagggac cgcggggagg A ggggcgccag cggctccagc gcagagactc tcactgcacg ccggaggccc ctctctcgct ccgcccgcgc gaccgcgcgc cccagtcgcc cccgcccgcg ctaaccgcccc cagacacagc gctgcgccag ggtcgcttgg acctgatct taccgtggg caccctgcgc tctgctgccc gcgaagaccg gctccccgac ccgcagaaagt caggagagag ggtgaagcgg agcagcccga ggcggggcag cctcccgag cagcgccgcg cagagcccgg gacaatgggg ccgcggcgcc tgctgctggt ggccgctgc ttcagtcctgt gcggcccgct gttgtctgcc cgcacccggg ccgcagggcc agaatacaaa gcaacaaatg ccaccttaga tccccggtca tttctctca ggaaccccaa tgataaatat gaacctttt gggaggatga ggagaaaaat gaaagtgggt taactgaata cagattagtc tccatcaata aaagcagtc tctcaaaaa caacttctg cattcatctc agaagatgcc tccggatatt tgaccagctc ctggctgaca ctcttctgccc catctgtgta caccggagtg ttgttagtca gcctccact aaacatcatg gccatcgctg tgttcatcct gaaaatgaag gtcaagaagc cggcggtggt gtacatgctg cacctggcca cggcagatgt gctgtttgtg tctgtgctcc cctttaagat cagctattac tttccggca gtgattggca gtttgggtct gaattgtgc gcttcgtcac tgcagcattt tactgtaaca tgtacgctc tatctgtctc atgacagtca taagcattga ccggtttctg gctgtggtgt atcccatgca gtccctctcc tggcgtactc tgggaagggc ttccttctac tgtctggcca tctgggcttt ggccatcgca ggggtagtgc ctctcgctct caaggagcaa accatccagg tgcccggtct caacatcact acctgtcatg atgtgtctaa tgaacccctg ctgaaggct actatgccta ctacttctca gccttctctg ctgtctctt ttttgtgccc ctgatcattt ccacggtctg ttatgtgtct atcattcgat gtcttagctc ttcgcagtt gccaacgca gcaagaagtc ccgggctttg ttccgtgcag ctgtgtttt ctgcatcttc atcatttct tcggaccac aaacgtctc ctgattgcgc attactcatt ccttctcac acttccacca cagaggctgc ctactttgcc tactctctc gtgtctgtgt cagcagcata agctcgtgca tcgacccctc aatttactat taagcttctc ctgagtgcca gaggtacgtc tacagtatct tatgtgcaa agaaagtcc gatcccgca gttataacag cagtgggagc ttgatggcaa gtaaatgga tactgtctct agtaacctga ataacagcat atacaaaaag ctgttaactt agggaaaagg actgctggga ggttaaaaaa aaaagtttat aaaagtgaat aacctgagga ttctattagt cccaccccaa actttattga ttcacctctc aaacacacag atgtacgact tgcatacctg ctttttatgg gagctgtcaa gcattgtatt ttgtcaatta ccagaaagat aacaggacga gatgacgggt ttattccaa ggaattatgc caatgctaca gtaataatg aatgtcactt ctggatatag ctaggtgaca tatacactac tacatgtgtg tatatgtaga	Homo sapiens	

324	4687	Thrombin Receptor	NP_001983.1	<p> tgtatgcaca cacatatatt atttgcagtg cagtatagaa taggcacttt aaaacactct  tccccgcac ccagcaatt atgaaaataa tctctgattc cctgatttaa tatgcaaaagt  ctaggttggt agagtttagc cctgaacatt tcatgtgtgt catcaacagt gagagactcc  atagtttggg ctgtaccac ttttgcaaat aagtgtattt tgaattgttt tgacggcaag  gtttaagtta ttaagaggtg agacttagta ctatctgtgc gtagaagttc tagtgttttc  aattttaaac atatccaagt ttgaattcct aaatttatgg aacagatga aaagcctctg  ttttgatag gtagtatatt ttacatttt acacactgta cacataagcc aaactgagc  ataagtctc tagtgaatgt aggtggctt tcagagttagg ctattcctga gagctgcatg  tgtccgccc cgatggagga ctccaggcag cagacacatg ccagggccat gtcagacaca  gattggccag aaccttct gctgagcctc acagcagtga gactgggcc actacattg  ctccatctc ctgggattgg ctgtgaactg atcatgtta tgagaaactg gcaaaagcaga  atgtgatatc ctaggaggtg atgacatga aagacttctc taccatctt aaaaacaacg  aaagaaaggca tggacttctg gatgcccatc cactgggtgt aaacacatct agtagttgtt  ctgaaatgtc agttctgata tggaaagcacc cattatggc tgtggccact ccaataggtg  ctgagtgtac agagtggaat aagacagaga cctgccctca agagcaaat agatcatgca  tagagtgtga tgtatgtga ataaatatgt ttcacacaaa caaggcctgt cagctaaaga  agtttgaca ttgggttac tattcttgt gttataact taatgaaaac aatgcagtagc  aggacatata ttttttaaaa taagtctgat ttaattgggc actatttatt tacaatgtt  ttgtcaata gattgtcaa atcaggtttt tttttaagaa tcaatcatgt cagtctgctt  agaaataaca gaagaaaata gaattgacat tgaaatctag gaaaattatt ctataatttc  catttactta agacttaatg agactttaaa agcattttt aacctcctaa gtatcaagta  tagaaaaatc tcatggaatt cacaagtaa tttggaatt aggttgaaac atatctcta  tcttacgaaa aaatggtagc attttaaca aaatagaag ttgcaaggca atgttttatt  taaaagagca gccaggcgc ggtggctcac gcctgtaac ccagcattt gggaggtga  ggcgggtgga tcacgaggtc aggatcgga gaccatcctg gctaacacgg tgaacccgt  ctctactaaa atgcacaaa aaattagcgg ggcgtgtggc caggcacctg tagtcccagc  tactcgggag gctgaggcag gagactggcg tgaacccagg aggcggacct tgtagttagc  cgagatcgcg ccactgtgct ccagcctggg caacagagca agactccatc tc  MGPRRLIIVA ACFSLCGPLL SARTRARRPE SKATNAILDP RSFLLRNPND KYEPFWEDEE P  KNESGLTEYR LVSINKSSPL QKQLPAFISE DASGYLTSSW LTLFVPSVYT GFVVSPLPLN sapiens  IMAIIVFILK MKVKKPAVVY MLHLATADVL FVSVLPFKIS YFSGSDWQF GSELCRFVTA  AFYCNMYASI LLMTVISIDR FLAVVYPMQS LSWRTLGRAS FTCLAIWALA IAGVVPVLVK  EQTIQVPLGN ITTCHDVINE TLLEGYYAYY FSAFSAVFFF VPLIISTVCY VSIIRCLSSS  AVANRSKHSR ALFLSAAVFC IFICFGPTN VLLIAHYSFL SHTSTTEAAY FAYLLCVCVS  SISSCIDPLI YYYASSECQR YVYSILCCKE SSDPSSYNSS GQLMASKMDT CSSNLNNSIY  KKLLT </p>	Homo sapiens
325	4734	Thyrotropin Releasing Hormone Receptor	NM_003301	<p> tagcttcaag ccactgaaga tggaaaacga gacagtcaagt gaactgaacc aaacacagct A  tcagccacga gcagtggtgg ccttagaata ccagtggtc accatcttac ttgtactcat  tatttgtggc ctgggcattg taggcaacat catggtagtc ctggttgta tgagaaccaa  gcacatgagg accccacaa actgtacct ggtgagcctg gcagtagctg atctcatggt  cttggtggcc gcaggcctcc ccaacataac agacagtatc tacggttctc gggtctatgg </p>	Homo sapiens

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326	4734	Thyrotropin Releasing Hormone Receptor	NP_003292.1	<p>ctatgttggg tgcctctgca ttacttacct ccagtatttg ggaattaatg catcctctttg</p> <p>ttcaataaca gcctttacca ttgagaggta catagcaatc tgtcacccca tcaaaagccca</p> <p>gtttctctgc acattttcca gagccaaaaa gattatcatc tttgtctggg ctttcacatc</p> <p>tctttactgt atgctctggg tcttcttggt ggatctcaat attagcacct acaagatgc</p> <p>tattgtgata tcctgtgggt acaagatctc caggaattac tactcaccta tttacctaat</p> <p>ggactttggg gtcttttatg ttgtgccaat gatcctggct accgtcctct atggattcat</p> <p>agctagaatc cttttcttaa atccattcc ttcatgacct aaagaaaact ctaagacatg</p> <p>gaaaaatgat tcaaccatc agaacacaaa tctgaatgta aatacctcta atagatgttt</p> <p>caacagcaca gtatcttcaa ggaagcaggt caccaagatg ctggcagtggt ttgtaattct</p> <p>gtttgcccct ttatggatgc cctacaggac tctagtgggt gtcaactcat ttctctccag</p> <p>tcctttccaa gaaaattgggt ttttgcctct ttgcagaatt tgcatttate tcaacagtgc</p> <p>catcaaccgg gtgatttaca atctcatgtc ccagaaatc cgtcagacct tcagaaagct</p> <p>ctgcaactgc aagcagaagc caacagagaa acctgctaac tacagtgtgg cctaaaatta</p> <p>cagcgtcatc aaggagtcag accttttcag cacagagctt gatgatatca ctgtoactga</p> <p>cacttacctg tctgccacaa aagtgtcttt tgatgacacc tgcctggcct ctgaggtatc</p> <p>ctttagccaa agttgattca tgaattagaa gaaaatggat gacaaaagaa ttgagaatct</p> <p>gtgcagtcac caacaaaagg gagaacatgg ccaatagtea tatgtgaaga cagagcagat</p> <p>cagtctttgt caatgctcta acaaacccg</p>	Homo sapiens
				<p>LVLIIICGLI VGNIMVLV MRKHMRTPT P</p> <p>NCYLVSALA DLMVLAAGL PNITDSIYGS WYGYVGLC ITYLQYLGIN ASSCSITAFI</p> <p>IERYIAICHP IKAQFLCTFS RAKKIIIFW AFTSLYCLMW FFLDLNIST YKDAIVISCG</p> <p>YKISRNYSP IYLMDFGVF VVPMILATVL YGFIAIRILFL NPIPSDPKEN SKTWKNDSTH</p> <p>QNTNLNVNTS NRCFNSTVSS RKQVTKMLAV VILFALLWM PYRTLAVVNS FLSSPFQENW</p> <p>FLFCRICIY LNSAINPIY NLMSQKFRAA FRKLCNCKQK PTEKPANYSV ALNYSVIKES</p> <p>DHFSTELDDI TVTDITYLSAT KVSFDDTCLA SEVSFSQS</p>	
327	4944	Angiotensin II Type 1 Receptor	NM_000685	<p>attegagact gcctcctcgc caatgattcc agcgcctgac agccaggacc ccaggcagca A</p> <p>gcgagtgaac ggacgtctgg accggcgcgc cgctagcagc tctgccgggc cggcgcggtg</p> <p>atcgatgggg agcggctgga gcggaccag cgagtgggg gcacacagcg ggacgccgag</p> <p>cggcgggcg gcgagaccgc accagcgag cggccctcg cggggacgtg acgcagcgcc</p> <p>cggggcgcg gttgatatt tgacaaattg atctaaaatg gctggggttt tatctgaata</p> <p>actcactgat gccatcccg aaagtcggca ccagggtgat ttgatatagt gtttgcaaca</p> <p>aactcgaccc aggtgatcaa aatgattctc aactctcta ctgaagatgg tattaaaaga</p> <p>atccaagatg attgtcccaa agctggaagg cataattaca tattgtcat gattcctact</p> <p>ttatacagta tcatctttgt ggtgggaata ttggaaaca gcttgggtgt gatagtcatt</p> <p>tactttata tgaagctgaa gactgtggcc agtgttttc tttgaaattt agcactggct</p> <p>gacttatgct ttttactgac ttggccacta tgggtgtgtt acacagctat ggaataccgc</p> <p>tggccctttg gcaattacct atgtaagatt gcttcagcca gcgtcagttt caacctgtac</p> <p>gctagtgtgt ttctactcac gtgtctcagc attgatcgat acctggctat tgttaccaca</p> <p>atgaagtccc gccttcgacg cacaatgctt gtgacaaaag tccctgcat catcatttgg</p> <p>ctgtggcag gcttggccag ttggccagct ataatccatc gaaatgtatt tttcattgag</p> <p>aacaccaata ttacagtttg tgctttccat tatgagtccc aaattcaac ccttccgata</p>	Homo sapiens

328	4944	Angiotensin II Type 1 Receptor	NP_000676.1	IKRIQDDCPK AGRHNYIFVM IPTLYSIIFV VGIFGNSLVV IVIFYMKLJK P TVASVFLLNL ALADLCFLLT LPIMAVVTAM EYRWPFNGVL CKIASASVSF NLVASVFLLT CLSIDRYLAI VPMKSLRR TMLVAKVTCI IIWLLAGLAS LPALHNRNV FIENTNITVC AFHYESQNST LPIGLGLTKN ILGFLFPFLI ILTSYTLIWK ALKKAYEIQK NKPRNDDIFK IIMAVLFFF FSWIPHQIFT FLDVLIQLGI IRDCRIADIV DTAMPITICI AYFNCLNPL FYGFLGKKFK RYFLQLLKYI PPKAKSHSNL STKMSTLSYR PSDNVSSSTK KPAPCFEVE	Homo sapiens
329	4946	Angiotensin II Type 2 Receptor	NM_000686	acgtcccagc gtctgagaga agagtaagc aagaattcaa agcattctgc agcctgaatt A ttgaaggagt gtgttttagc actaagcaag ctgattttatg ataactgctt taaactcaa caaccaaaag cataagaact aggagctgct gacattttcaa tatgaaggcg aactccaccc ttgccactac tagcaaaaac attaccagcg gtcttcactt cgggctgtg aacatctctg gcaacaatga gtctaccttg aactgttcac agaaaccatc agataagcat ttagatgcaa ttcctattct ttactacatt atattgttaa ttggatttct ggtcaatatt gtcgtggtta cactgttttg ttgtcaaaag ggctctaaaa aggtttcttag catatacatc ttcaacctcg ctgtggctga ttactcctt ttggctactc ttctctatg ggcaacctat tattcttata gatatgactg gctcttttga cctgtgatgt gcaaaagtttt tggttctttt cttaacctga acatgtttgc aagcattttt ttatcacct gcataagtgat tgataggtag caatctgtca tctacccctt tctgtctcaa agaagaatc cctggcaagc atcttatata gttcccttg	Homo sapiens

gggctgggccc tgacacaaaa tatactgggt ttctgttttc cttttctgat cattcttaca  
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 aaactgctgt taattgatta aaacttgga agtttatatt tactttaaaa taaaaataatt  
 ttattgg

330	4946	Angiotensin II Type 2 Receptor	NP_000677.1	<p> tttggtgtat ggcctgtttg tctcattgc caacatttta ttttcgagac gtcagaacca  ttgaatactt agagtgtaat gcttgcatTA tggctttccc acctgagaaa tatgcccatt  ggtcagctgg gattgcctta atgaaaaata tcccttggtt tattatccct ttaataattca  tagcaacatg ctatttttga attagaaaac acctactgaa gacgaatagc tatgggaaga  acaggataac ccgtgaccAA gtcctgaaga tggcagctgc tgttgttctg gccttcacTa  tttggtgcct tcccttccat gttctgacct tccctgagtc tctggcctgg atgggtgtca  ttaatagctg cgaagtata gcagtcattg acctggcact tccctttgcc atcctcttgg  gattcaccaa cagctgcgtt aatccgtttc tgtattgttt tgttggaac cggttccaac  agaagctccg cagtgtgttt aggttccaa ttacttggct ccaagggaaa agagagagta  tgtcttgccg gaaaagcagt tctcttagag aatggagac ctttgtgtct taaacggaga  gcaaatgca tgtaatacaac atggctactt gctttgagc tcaccagaat tatttttaag  tggttttaat aaataataa aatttccct aatcttttct gaatcttctg aaaccaaag  taactatgtt tatcgtccag tgactttcag gaatgccat tgttttctga tatgtttgtA  caagatttca ttggtgagac atatttaca cctagaagta actgggtgata tatctcaaat  tgtaattaat aatagattgt gaataatgat ttggggattc agatttctct ttgaacatg  cttggttttc ttagtgggtt ttatatcca tttttatcag gatttctctc tgaaccagaa  ccagtctttc aactcattgc atcattaca agacaacatt gtaagagaga tgagcacttc  taagttgagt atattataat agattagtagc tggattattc aggttttagg catatgcttc  tttaaaaacg ctataaatta tattctctct gcatttcaat tgagtggagg ttatagtta  atctataact acatatggaa taggctagg aatatagatt aaatcatact cctatgcttt  agcttatattt tacagttata gaaagcaaga tgtactataa catagaattg caatctataa  tatttgtgtg ttcactaaac tctgaataag cactttttta aaaaactttct actcatttta  atgattgttt aaaggtttct attttctctg atactttttt gaaatcagta aacactgtgt  attgtgttaa aatgtaaaag tcacttttca catccttgac tttttagatg tgctgctttg  atatatagga cattgatttg atttttatta ttaatgcttt ggttctgggt tgtttcctaa  aatatctggg tggcttaaaa aaaactcttt aacttgaat aaaccttaa ctggcatagg  aaatggtatc cagaatggaa ttttgctaca tggggtctgg gtgggggcaa agagacccag  tcaattacat gtttgggtacc aagaaaggaa cctgtcaggg cagtacaaat tgactttgaa  aatataacc gtgggggttag ttttacccta tatctataaa cactgtttgt tccagaatct  gtatgattct atggagctat tttaaaccaa ttgcaggtct aga  MKGNSTLATP SKNITSLHF GLVNISGNNE STLNCQKPS DKHLDAIPIL YYIIFVIGFL P  VNIVVTLFC CQKGPVKVSS IYIFNLAVAD LLLLATPLPW ATYYSRYRDW LFGPVMCKVF  GSFLTLNMEA SIFFITCMSV DRYQSVIYPF LSQRNPWQA SYIVPLVWCM ACLSSLPTFY  FRDVRTIEYL GVNACIMAFP PEKYAQWSAG IALMKNILGF IIPLIPIATC YFGIRKHLK  TNSYGNKRIT RDQVLKMAAA VVLAFLIWCIL PFHVLTFDLA LAWMGVINSC EVIAVIDLAL  PFAILLGFTN SCVNPFLYCF VGNRFQKLR SVFRVPITWL QGKRESMSCR KSSSLREMET  FVS </p>	Homo sapiens
331	5072	Pyrimidinerg ic Receptor P2Y4	NM_002565	<p> atgggcagta cagagtctc cctgttgaga tccctaggcc tcagcccagg tcttggcagc A  agttaggtgg agctggactg ttggtttgat gaggatttca agttcatcct gctgcctgtg  agctatgcag ttgtctttgt gctgggcttg ggccttaacg ccccaacct atggctcttc  atcttccgcc tccgacctg ggatgcaacg gccacctaca tgttccacct ggcatgtgca </p>	Homo sapiens

332	5072	Pyrimidinerg ic Receptor P2Y4	NP_002556.1	MASTESSLLR IFRLRPWDAT CSVLFTLCIS TTVLCHDTR LRLRLTIADV LDPVLYLLTG RADRL	SLGLSPGPGS ATYMFHLALS VHRYLGICHP PEEFHYVHF LTFEAVCFVP DKYRRQLRQL	SEVELDCWFD DTLYVLSLPT LRALRWGRPR SSAVMGLLEF FHITRTIYYL CGGKRPQPR	EDFKFILLPV LIYYAAHNH LAGLLCLAVW VPCLLTLCVY ARLEADCRV AASLLALVSL	SYAVFVLGL WPFGEICKF LVVAGCLVFN GLMARRLYQP LNIVNVVYKV PEDSSCRWAA	GLNAPTLMWLF VRFLFYWNLY LFFVTTSNKG LPGSAQSSSR TRPLASANSC TPQDSSCSTP	Homo sapiens
333	5117	Vasopressin V1A Receptor	NM_000706	taattgcttg catccctgaa aacacagctt cccgatgacc acccaggatt tgacaaacctt actgcaatga ctgagggcaat tgctcctgca tgcctgaaaa gagctgaggg agagtaacgg ctttgagatt gccctggaca agatgtcccc ccgccatccc aactccttaa tgtgaataca caaacatagg	aaggattttt ccatttcaat tcagttttta tcaacaacag atctagccac ggtaactctg ataaaatctt taaatttata tctacacagc cagctcccc agatcgcatt attactaggt gcctctttct gactgcctg acgactcagt cgctgtggga gtccctagtc ggcacagcag gtaataaata	tcacagacag aggaagcagg gaaagcagg catgaacgga ttgcattttt ccacggccac agataactgc ttgtgtcccg tctgcctccc aggtggttgt tactcctgag gatggccgct agtaaccaga atcaggcttt tccatagaga ccactggggc gcatgcatca	tggtctggaa ctggatatct cccatataga tcctttcatt actccagatt ctggatagta tgcctacgtt aatactgaaa agaaacggct tcgaggcata tcccgcctcg tcccgcctcg tcccgcctcg cacaggagcc gtccggcgct cggtccccc tcccgcacag aaccccagaa aaacccagag ctgaaagtga	accttttacc tggagaaaa acattgtctt tccatttata tcaagtccag aagtggaaat tcacagaggg cgttctgacc tcctttcttc tcttcaccaa cagaggggct tcccagggcc ggcggggttt tgctctttgt ggaccactgc aaccccagga acactcccc tgagtgcgtt taggaagaga	tattaccttc gaaccaaac acttgatctt agacgcacag catctcaacg attactgaga tgataatttt aacaagtca cttgtaaaat cgttaaaaa ccagctgttc tctttcctct tctgtccctt ccacccaaaa ggccaaattt atctagagaa caaaccccg cttcccgtcg tagctcttta	Homo sapiens



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tatttttaa ggaataatca taaccacct agctttatat tttgttgta gtttcttta  
ttttcatttc taacataagt aagacttgat tggtttaaaa gtacacataaa atcggcact

334	5117	Vasopressin V1A Receptor	NP_000697.1	PSGNSSPWPP	LATGAGNTSR	EAEALGEGNG	PPRDVRNEEL	AKLEIAVLAV	P	Homo sapiens
				TEFAVAVLGNS	SVLLALHRTF	RKTSRMHLFI	RHLSLADLAV	AFQVLPQMC	WDITYRFRGP	
				DWLCRVVKHL	QVFGMEASAY	MLVVMTADRY	IAVCHPLKTL	QQPARRSRML	IAAAWVLSFV	
				LSTPQYFVES	MEIVNNVTKA	RDCWATFIQP	WGSRAYVTWM	TGGIFVAPVV	ILGTCYGFIC	
				YNIWCNVRGK	TASRQSKGAE	QAGVAFQKGF	LLAPCVSSVK	SISRAKIRTV	KMTFVIVITAY	
				IVCWAFEFII	QMWSVWDPMPS	VWTESENPTI	TITALLGSLN	SCCNPWIMYMF	FSGHLLQDCV	
				QSFPCQNMK	EKENKEDTDS	MSRRQTFYSN	NRSPNTNSTM	WKDSPKSSKS	IKFIPVST	
335	5118	Vasopressin V1B Receptor	NM_000707	ctccagccgc	tgctcaccag	gcagagccag	cgggcttgcc	tggggcttcc	tgccctgagc	A
				gcgacaccga	ctgctccgga	ccgcccctcc	agcagcgtcg	aagggcttcc	gctcttggtc	
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336 5118 Vasopressin NP\_000698.1 MDGRLWDAN PTPRGTLTSLAP NATTPWLGRD EELAKVEIGV LATVLVLATG GNLAVLLTLG P Homo sapiens  
V1B Receptor

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GGGWRTWDRP SPSTLAATTR GLPSRVSSIN TISRKIRTV KMTFVIVLAY IACWAPFFSV  
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TIIF

337 5119 Vasopressin NM\_000054 agaagatcct gggttctgtg catcctgtctg tctgaccatc cctctcaatc ttccctgccc A Homo sapiens  
V2 Receptor

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Homo  
sapiens

P

338 5119 Vasopressin NP\_000045.1  
V2 Receptor

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Homo  
sapiens

A

339 5133 Peropsin NM\_006583

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341	5519	Brain-Specific Angiogenesis Inhibitor 1	NM_001702	ggactttaga agccgttgct gccctctctg tcaactgaag cggggccctc tcccatccca A cccttgcccc gccctccctgc ccccaaccgg cgggccctgc cgcgcgcgg accctggcat gtcaagacct ggtccgcgcc tgcctgccc gccgcgggaa ccccggcggc cccgcgagct aggaatgagg gccaggccgc cgcgcgcggc cgcgcgcgg gagcagacgc ggggccccgg ctgctgctgc tgcctgggacg cgcgcgcggc ggtgcaggga aagtctcttc gctacttctc cgcgcgcggc cccgagccgt gcgccacgt gccacgcctc gcgctgctcc tggacgctac gcaacccgga cccgcgcgcg gtgttccccg ccaacgcctc acatgaaggt ggcaaggcg cccgtgccct gcagcggccc cgcgcgcgtg tacactctct agttegactc ctctctcgag tccacgcgca cctacctggg cgtggagagc cgcaactacc agttegactc ctctctcgag tccacgcgca cctacctggg cgtggagagc ttcgacgagg tgcctgggct ctgcgacccc tccgcacccc tggccttctc gcaggccagc aagcagttcc tgcagatgcg gcgccagcag cgcgccacgc acgacgggct cgcgcgcgg gccgggcccgc cgggcccac gcagacttc tccgtggagt acctggtggt ggggaacgcg aaccacagcc gtgcgcctg ccagatgctg tgcgcctggc tggacgcgtg tctggccggt agtcgcagct cgcacccctg cgggatactg cagacccctc gcgcctgctt gggcggcgag gcgggcccgc ctgcgcggg accctggcc ccccgcgggg atgtctgctt gagagatgcg gtggctggtg gccctgaaa ctgcctcac agcctgaccc aggacccggg cgggcacggc gccacaggcg gctggaagct gtggtccctg tggggcgaaat gcacgcggga ctgcggggga ggcctccaga cgcggagcgc cactgctcg cccgcgcggc gcgtggaggg cgcgcgcgtc gagggggtgc tggaggaggg tgcagatgc aaccgcgag cctgcggccc cgtgggcgc accagctccc ggagccagtc cctgcggctc acagatgccc ggcggcgga gagctggg gacgagctgc agcagtttgg gtccccagcc cccagaccg gtgacccagc agccgaggag tggccccctg ggagcgtgtg ctccagcacc tgcggcgagg gctggcagac cgcacgcgc ttctgctgtt cctcctccta cagcacgcag tgcagcggac cctgcgcga gcagcggctg tgcaacaact ctgcctgtg cccagtgcat ggtgcctggg atgagtgtc gccctggagc ctctgctcca gcacctgtg cctgggcttt cgggatacga cgcgcacctg caggcccccc cagtttggg gccacccctg tgagggccct gagaagcaaa ccaagtctct caacattgcc ctgtgccctg gccgggcagt ggatggaaac tggaaatgagt ggtcgagctg gagcgctgc tccgccagct gctccaggg ccgacagcag cgcacgcgtg aatgcaacgg gccttctac gggggtgcgg agtgccaggg ccactgggtg gagacccgag actgcttct gcagcagtc ccagtggatg gcaagtggca ggcctgggcg tcatggggca gttgcagct cactgtggg gctggcagcc agcagcggga gcgtgtctgc tctggccct tcttcggggg agcagcctgc caggggcccc aggatgagta ccggcagtc gcgacccagc ggtgtccga gcccatgag atctgtgatg aggaacaatt tgggtgctgt atctggaaag agacccagc gggagagggtg	Homo sapiens

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342	5519	Brain-Specific Angiogenesis Inhibitor 1	NP_001693.1	MRGQAAAPGP VWILAPLILL LLLGLRRARA AAGADAGPGP EPCATLVQOK FFGYFSAAV P	Homo sapiens
				FPANASRCSW TLRNPDPRRY TLYMKVAKAP VPCSGPGRVR TYQFDSFLES TRTYLGVESE	
				DEVLRLCDPS APLAFLQASK QFLQMRROQP PQHDGLRPRA GPPGPTDDFS VEYLVVGNRN	
				PSRAACQMLC RWLDACLAGS RSSHPCGIMQ TPCACLGGEA GGPAAGPLAP RGDVCLRDVAV	
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				LQRNTTVLNS KVISVTVKPP PRSLRTPLEI EFAHMYNGTT NQTCILWDET DVPSSSAPPQ	
				LGPWSWRGCR TVPLDALRTR CLCDRLSTFA ILAQLSADAN MEKATLPSVT LIVGCGVSSL	
				TLMLVIIYV SWRYIRSER SVILINFCLS IISNALILI GQTQTRNKVM CTLVA AFLHF	
				FFLSSFCWVL TEAWQSYMAV TGHLRNRLIR KRFLCLGWGL PALVVAISVG FTKAKGYSTM	
				NYCWLSEGG LLYAFVGPAA AVVLVNMVIG ILVFNKLVS K DIGITDKLKE RAGASLWSSC	
				VVLP LLALTW MSVLA VTD R RSALFQILEA VFDSLEGFVI VMVHCILRRE VQDAVKCRVV	
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343	5520	Brain-Specific Angiogenesis Inhibitor 2	NM_001703	<p>           GDGDFKKLD SELSRAQEKALDTSYVILPTATATLRPKPK EEPKYSIHID QMPQTRLIHL            STAPEASLPA RSPPSRQPPSGPPEAPPAQ PPPPPPPPP PPQQLPPPP NLEPAPPSLG            DPGEPAHPG PSTGPSTKNE NVATLSVSSL ERKSRYAEL DFEKIMHTRK RHQDMFQDLN            RKLQHAAEKD KEVLGPDSPK EKQOTPNKRP WESLRKAHGT PTWVKKELEP LQSPLELRS            VEWERSGATI PLVGQDIIDL QTEV         </p> <p>           ggcgcgcggg agagcgggag cctcggccct cgcgcgggct gcagctacct accctgcgc A            cggccaggtc cccgacttag ggatggcaaa ctgcgcccc gtggcggccc cgcgcagcgc            cggccccgcg tctgtctgct gacggcgccc aggaatcca cagcagtgat acatgtgacg            tccacactga cagtgcctc ctgtgggcat ggtcagggt gtgcgaggt cctggcacac            tggctgtaac tccgcccc tctctccc tcatgaaagc aagattacgc ggtgacatgc            ctcacagctg atcacgacac acggggatgg agagcaagag ttatggagaa tacaggttgg            atgggcaagg gacataggat gacccagcc tgtcccctct tactgtctgt gattctgtcc            ctgcgcctgg ccacgcctt cgacccgcg cccagtgcc gtctgccc gtccctcgggt            gtgctctacg gggccttctc gctgcaggac ctctttctta ccatgcctc gggctgctcc            tggaccctgg agaaccctga cccaccaaag tactccctct acctgcgctt caaccgccag            ggcaggtgt gcgcacactt tgccccccg ctgctgcccc tggaccacta cctgggtcaac            tttaacctgc tgcggcctag ccccgaggag gcggtggccc agcggagtc agaggtgggg            cggccagaag aggagggagg agagcgga cgggggttg agctgtgcag cggctcaggc            cctttacct tctgcactt cgacaagaac ttctgtcagc tgtgcctgtc ggctgagccc            tccgaggccc cgcgcctgct ggcgcgcgt gccctagcct tccgctttgt cgaggtcttg            ctcatcaaca acaacaactc tagccaattc acctgtgtg tgctctgcg ctggagtgag            gagtgtggcc gcgctgcgg cagggcctgc caccaccacc acatctccag gccctcctgc tgccacacc            ggagaggcgg gggcgggtc ccccggtgccc cggggggccc atgagatag gtgaggagcc ggaagaggaa            ctgtccaatg cctgtgtgc cacaaccgag atgagatag ctgggctata catggcgag            cgaagagtga aaaccagtg gccaggtct cgtgtgagc tgtgttccct gacgtgtggg            acaggcgacc cggcggctga ggagtgttc cgtgtgagc cctatgggac cctgtgcagc            cagggtctgc aggtgcggac ccgtcctgt gtgtctctcc cctgtgggag gcacggcgtg            gggccccctgc gggagaccag gccctgcaac aatcagcca cctgcccagt gcacggcgtg            tgggaggagt ggggtctctg gacctgtgc tccgcagct cggggcgggg gtcccggagc            cggatgcgga cctgcgtgc ccccgagcac ggcggcaagg cctgcgaggg tctgagctg            cagactaagc tctgcagtat ggtgcctgc ccgtgtgaa gccagtggtt agaattgggt            ccttggggcc catgtccac gtctgtgc aatgggaccc aacagcgag ccggaagtgc            aggtggcg gcccagcctg gccacatgc acgggtgccc tcactgacac cgggagtg            agcaacctcg agtgcccg cactgatgc aagtgggggc catggaatgc gtggagcctg            tgcctaaaga cgtgtgacac aggtggcag cgcgcttcc gcatgtgcca ggccacgggc            acgcagggct accctgcga gggcaccgga gaggaggtga agccttgtag tgagaagagg            tgtccagcct tccatgagat gtgcaggat ggtacgtga tgcctgatgc gtggaagaag            gcagctgtgc gcgagatcat ctacaacaag tccccccga atgcctcagg gtctgccagc            cgcgcgtgc tctcagtc ccaaggcgt gcgtactgg ggctgcccag cttgtctcgc            tgcactctcc atgagtaccg ctacctgtat ctgtactta ggagcacct ggccaagggg         </p>	Homo sapiens
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344	5520	Brain- Specific Angiogenesis Inhibitor 2	NP_001694.1	<p>ccgcccacac ccagcgcccg ccäagtgccc gagccagggg agcgagccg gaccatgcct</p> <p>cgcacgtgc ccggtctac catgaagatg ggctccctgg agcgaagaa attacgtat</p> <p>tcagacctgg actttgaggt gatgcacacc cggaacggc attcagaact ctaccacgag</p> <p>ctcaaccaga agttccacac ttctgaccgc taccgacgc agtccacggc caagagggag</p> <p>aagcgtgga gtgtgtctc ggggtgggag cccgagcgga gcgtgtgcac cgataagccc</p> <p>agccctggg agcgccccc cttgtcccaa catcgcgcc atcagagctg gagcaccttc</p> <p>aaatctatga cactgggctc gctgcccccc aagccccgag aacggctgac tctgcaccgg</p> <p>gcagcagcct gggagccac agaaccacgg gatggtgact tccagacaga ggtgtgagt</p> <p>ccacgtgga ctgcccactg catataaata tatatatctc tctatttca cactccactt</p> <p>tggaactacc caggagccag cgccctctcc cctctccga ggcctgggca gggagcgcc</p> <p>gtggactcag ccaggtggg ggagccggac atggcttggc ctggggtccc agggcccttc</p> <p>ctgtttctc agagggccct cagccactgg aaccccatct tcagcccagc ctgtccgctc</p> <p>ctgtcccggg ctggggaggg gggaggggaa cttgttggg aataaacttc actctgtg</p> <p>MTPACPLLLS VILSLRLATA FDPAPSACSA LASGVLGAF SLQDLFPTIA SGCSWTLENP P</p> <p>DPTKYSLYLR FNRQEQVCAH FAPRLPLDH YLVNFTCLR SPEEAVAQAE SEVGRPEEEE</p> <p>AEAAAGLELC SGSGPFTFLH FDKNFVQLCL SAEPSEAPRL LAPAALAFRF VEVLLINNN</p> <p>SSQFTCGVIC RWSEECGRAA GRACGFAQPG CSCPGEAGAG STTTTSPGPP AAHTLSNALV</p> <p>PGGPAPPAEA DLHSGSSNDL FTTEMRYGEE PEEPKVKTQ WPRSADEPGL YMAQTGDPAA</p> <p>EEWSPWVCS LTCGQGLQVR TRSCVSPYG TLCSGPLRET PCNNSATCP VHGVWEEWGS</p> <p>WSLCSRSCGR GSRSRMRTCV PPQHGKACE GPQLQKLS MACPVEGOW LEWGPWGPCS</p> <p>TSCANGTQQR SRKCSVAGPA WATCTGALTD TRECSNLECP ATDSKWGPWN AWSLCSKTCD</p> <p>TGWQRRFRMC QATGTQGYPC EGTGEEVKPC SEKRCAPFHE MCRDEYVMLM TWKKAAGEI</p> <p>IYNKCPPNAS GSASRRCLLS AQGVAYWGLP SFARCISHEY RYLYLSLREH LAKQRMLAG</p> <p>EGMSQVVRSL QELLARTTY SGDLLFSVDI LRNVDTFKR ATYVPSADDV QRFQVVSFM</p> <p>VDAENKEKWD DAQQVSPGSV HLLRWEDFI HLVGDALKAF QSSLIVTDNL VISIQREPVS</p> <p>AVSSDITFPM RRRGMKDWV RHSEDRFLFP KEVLSLSSPG KPATSGAAGS PGRGRPGTV</p> <p>PPGPGHSHQR LLPADPDESS YFVIGAVLYR TLGLILPPPR PPLAVTSRVM TTVTRPPTQP</p> <p>PAEPLITVEL SYIINGTTDP HCASWDYSRA DASSGWDTE NCQTLETQAA HTRCQCQHL</p> <p>TEAVLAQPPK DLTLELAGSP SVPLVIGCAV SCWALLTLLA IYAAFWRFK SERSIILLNF</p> <p>CLSIILASNIL ILVGQSRVLS KGVCTMTAAE LHFFFLSSFC WVLTEAWQSY LAVIGRMRTR</p> <p>LVRKRFLCLG WGLPALVVAV SVGFTRTKGY GTSSYCWLSL EGGLEYAFVG PAAVIVLVNM</p> <p>LIGIIVFNKL MARDGISDKS KKQAGSERC PWASLLPCLP ACQAVPSPLL SSASARNAMA</p> <p>SLWSSCVVLP LLALTWMSAV LAMTDRRSVL FQALFAVENS AQGFVITAVH CFLRREVQDV</p> <p>VKQMGVCRA DESEDSPDSC KNGQLQILSD FEKDVDLACQ TVLFEVNTC NPSTITGTLS</p> <p>RLSLDEDEEP KSCLVGPEGS LSFSPLPNGI LVPMAASPL GEPPPQPEAN PYMCGEGGL</p> <p>RQLDLTWLRP TEPGSEGDM VLPRRTLSLQ PGGGGGGGED APRARPEGTP RRAAKTVAH</p> <p>EGYPSFLSVD HSGLGLGPAY GSLQNPYGMT FQPPPTPSA QVPEPERS RMPRTVPGS</p> <p>TMKMSLERK KLRYSDDLFE VMHTRKRHSE LYHELNQKFEH TFDYRSQST AKREKRSVS</p> <p>SGGAALERSVC TDKPSPGERP SLSQHRRHQS WSTFKSMTLG SLPPKPRERL TLHRAAAWEP</p> <p>TEPDPGDFQT EV</p>	Homo sapiens
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345	5521	Brain-Specific Angiogenesis Inhibitor 3	NM_001704	Homo sapiens
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Homo  
sapiens

P

NP\_001695.1

Brain-  
Specific  
Angiogenesis  
Inhibitor 3

5521

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 TVLTDASHTK CLCDRLSTFA IIAQQPREII MESSGTPTSVT LIVSGLSCL ALITLAVVYA  
 ALWRYIRSER SIILINFCLS IISSNILIV GQTQTHNCSI CTTTAFLEH FFLASFCWVL  
 TEAWQSYMAV TGKIRTRLIR KRFCLGWGL PALVAVTSVG FTRTKGYGTD HCYWLSLEGG  
 LLYAFVGPAA AVLVNMVIG ILVFNKLVS R DGLDKKLKH RAGOMSEPHS GLTLKCAKCG  
 VVSTTALSAT TASNAMASLW SSCVVLPLLA LTWMSAVLAM TDKRSILFQI LFAVDSLQGG  
 FVIVMVHCIL RREVQDAFC RLNCQDPIN ADSSSFPNG HAQIMTDFEK DVDIACRSVL  
 HKDIGPCRAA TITGLSRIS LNDEEEKGT NPEGLSYSTL PGNVISKVII QOPTGLHMPM  
 SMNELSNPCL KENSELRRT VYLCTDDNLR GADMDIVHPQ ERMESDYIV MPRSSVNNQP  
 SMKEESKMWI GMETLPHERL LHYKVNPEFN MNPPVMDQFN MNLEQHLAPQ EHMQLPFEP  
 RTAVKNFMAS ELDDNAGLSR SETGSTISMS SLERRKSRYS DLDFEKVMHT RKRHMLFQE  
 LNQKFQTLDR FRDIPNTSSM ENPAPNKNPW DTFKNPSEYP HYTTINVLDT EAKDALELRP  
 AEWEKCLNLP LDVQEGDFQT EV  
 gtagacattg cttcatgagc aagctcatct ctggaacaaa ctggcaaaagc atctctgctg A  
 gtgttcatca gaacagacac catggcagag catgattacc atgaagacta tgggttcagc  
 agtttcaatg acagacgcca ggaggagcat caagacttcc tgcagttcag caaggtcttt  
 ctgcccctgca tgtacctggt ggtgtttgtc tgtggtctgg tggggaactc tctggtgctg  
 gtcataacca tcttctacca taagttgcag agcctgacgg atgtgttccct ggtgaacctc  
 cccctggctg acctgggtgt tgtctgcact ctgcccctct gggcctatgc aggcattccat  
 gaatgggtgt ttggccaggt catgtgcaag agcctactgg gcatctacac tattaacttc  
 tacacgtcca tgcctacatc cactgcacac actgtggatc gtttcattgt agtgggttaag  
 gccaccaagg cctacaacca gcaagccaaag aggatgacct ggggcaaggt caccagcttg  
 ctcatctggg tgatatccct gctggtttcc ttgccccaaa ttatctatgg caatgtcttt

Homo  
sapiens

A

NM\_006564

SIV/HIV  
Receptor  
BONZO

6031

347

348	6031	SIV/HIV Receptor BON20	NP_006555.1	<p> aattctcgaca agctcatatg tggttaccat gacgaggcaa ttccactgt ggttcttgcc  accagatga cactggggtt ctcttgcca ctgctacca tgattgtctg ctattcagtc  ataatcaaaa cactgcttca tgctggaggc ttccagaagc acagatctct aagatcatc  ttcctggtga tggctgtgtt cctgtgacc cagatgacct tcaacctcat gaagtctatc  cgcagcacac actgggaata ctatgccatg accagctttc actacacct catggttgaca  gaggccatcg catacctgag ggcctgctt aacctgtgc tctatgctt tgcagcctg  aagtttcgaa agaacttctg gaaactgtg aaggacattg gttgcctccc ttacctggg  gtctcacatc aatggaaatc ttctgaggac aattccaaga ctttttctgc ctcccacaat  gtggaggcca ccagcatgtt ccagttatag gccttgccag ggtttcgaga agctgctctg  gaatttgcaa gtcattgctg tgcctcttg atgtggtgag gcaggctttg ttatagctt  gcgcattctc atggagaagt taccagacac tctggctggt ttggaatgct tcttctcagg  catgaacatg tactgttctc ttcttgaaca ctcatgctga aagcccaagt aggggttcta  aaatttttaa ggactttcct tctccatct ccaagaatgc tgaacccaag ggggatgaca  tgtgactcct atgatctcag gttctccttg attgggactg gggctgaagg ttgaagaggt  gagcacggcc aacaaagctg ttgatggtag gtggcacact ggtgcccac gtcagaagg  ctcttctgac tactgggcaa agagtgtaga tcagagcagc agtgaacaa agtgcctggca  ccaccaggca cctcacagaa atgagatcag gctctgcctc acctggggc ttgactttg  tatagggtaga tgttcagatt gctttgatta atccagaata actagcacca gggactatga  atgggcaaaa ctgaattata agaggctgat aattccagt gtccatggaa tgcttgaaaa  atgtgcaaaa cagcgtttta gactgtaatt aatctaaaga gcatttctga agtgactct  ttggtgctt tgcattttta aatgaaatt ttccaatgtc tgccacacaa acgtatgtaa  atgtatatc ccacacacat acacacatat gtcatatatt actagcatat gagtttcaata  gctaagaaat aaaactgtta agtctccaa act </p>	Homo sapiens
349	6204	Lysophosphat idic Acid Receptor Edg4	NM_004720	<p> gcccagatgg tcatcatggg ccagtgtctac tacaacgaga ccatcggtt cttctataac A  aacagtggca aagagctcag ctcccactgg cggcccaagg atgtggtcgt ggtggcactg  gggctgaccg tcagcgtgct ggtgctgctg accaatctgc tggctatag agccatcgcc  tccaaccgcc gcttcacca gcccatctac tacctgtctg gcaatctggc cgcggctgac  ctcttcgcg gctgggcta cctctctc cctgtgctg acatctccca ctggtcccc cagagccga  ctttcaactg agggctgggt cctgcggcag ggcctgtgg acacaagcct cactgctcg  gtggccacac tgctggccat cgcctggag cggcacgca gtgtgatggc cgtgcagctg  cacagccgcc tgccccgtgg ccgctggtc atgctcattg tggcgtgtg ggtggctgccc  ctgggcttgg ggtgctgcc tgccactcc tggcactgcc tctgtgccc ggaccgctgc  tcacgcatgg caccctgct cagcgcctc tattggccg tctgggctct gtcgagcctg  cttgtcttcc tgctcatggt ggctgtgtac accgcattt tcttctacgt gcggcgcgga  gtgcagcgca tggcagagca tgtcagctgc caccctcgct accgagagac cagctcagc </p>	Homo sapiens

350	6204	Lysophosphat NP_004711.2	idic Acid Receptor Edg4	<p>ctggtcaaga ctgttgtcat catcctgggg gcgttcgtgg tctgctggac accaggccag</p> <p>gtgttactgc tcttgatgg tttagctgtt gactctgca atgtcctggc ttagaaaaag</p> <p>tacttcttac tgttgccga gccaactca ctgtcaatg ctgtgtgta ctcttgccga</p> <p>gatgtgaga tgcgccgac ctccgccc ctctctgtt gcgctgctt ccgccagctc</p> <p>accgcgagt ctgtccacta tacatctctt gccagggag gtccagcac tgcctcatg</p> <p>cttccgaga acggccacc actgatggac tccacctttt agctacctg aactcagcg</p> <p>gtacgaggca agcaacaat ccacagccc tgaagtctg tgggtgctc tggctcaacc</p> <p>caaccaacag gactgactg</p>	Homo sapiens
351	6213	C-C Chemokine Receptor 5	NM_000579	<p>MVINGQCYN ETIGFFYNNS GKELSSHWRP KDVVVVALGL TVSVLVLLTN LLVIAAIASN P</p> <p>RRHQPIYYL LGNLAAADLF AGVAYLFME HTGPRFARLS LEGWFLRQGL LDTSLTASVA</p> <p>TLIAIAVERH RSVMAVQLHS RLPRGRVVML IVGVWVAALG LGLLPAHSWH CICALDRCSR</p> <p>MAPLLRSYL AVWALSLLV FLLMVAVYTR IFFYVRRRVQ RMAEHVSCHP RYRETTLSLV</p> <p>KTVVILGAF VVCWTPGQV LLLDGLGES CNLAVEKYF LLLAEANSLV NAAVYSCRDA</p> <p>EMRRTFRRLL CCACLRQSTR ESVHYTSSAQ GGASTRIMLP ENGHPLMDST L</p> <p>cttcagatag attatatctg gactgaagga tctgcccacc tacgtatctg gcatagtatt A</p> <p>ctgtgtagt gtagagagag agacaaaaa caaataaatc cagtgaagaa agcccgtaaa</p> <p>taaaccttca gaccagagat ctattctcca gcttatttta agctcaactt aaaaagaaga</p> <p>actgttctct gattcttttc gcttccaata cacttaataa tttaactcca cctccttca</p> <p>aaagaaacag catttctac ttttatactg tctatatgat tgatttgac agtcatctg</p> <p>gccagaagag ctgagacatc cgttccccta caagaaactc tccccgggtg gaacaagatg</p> <p>gattatcaag tgtcaagtc aatctatgac atcaattatt atacatcgga gccctgccaa</p> <p>aaaatcaatg tgaagcaaat cgcagcccgc ctctgcctc cgctctactc actggtgttc</p> <p>atctttggtt ttgtgggcaa catgtgtgtc atctcatcc tgataaactg caaaaggctg</p> <p>aagagcatga ctgacatcta cctgctcaac ctggccatct ctgacctgtt ttctcttctt</p> <p>actgtccctt tctgggctca ctatgtgtgc gccagtggtg actttggaaa tacaatgtgt</p> <p>caactcttga cagggtctta ttttataggc ttcttctctg gaatcttctt catcatctc</p> <p>ctgacaatcg ataggtacct ggctgtctgc catgtgtgtt ttgctttaa agccaggacg</p> <p>gtcaccttgg ggtgtgtgac aagtgtgac actgggtgtg tggctgtgtt tgcgtctctc</p> <p>ccaggaaatca tctttaccag atctcaaaa gaaggtcttc attacacctg cagctctcat</p> <p>tttccataca gtacgtatca attctggaag aatttccaga cattaaagat agtcatcttg</p> <p>gggtgtgtcc tgcgctgtct tgtcatggtc atctgtact cggaatcct aaaaactctg</p> <p>cttcggtgtc gaaatgagaa gaagaggcac aggtgtgtga ggcttattt caccatcatg</p> <p>atgttttatt tctcttctg ggctccctac acaattgtcc ttctctgaa cacttccag</p> <p>gaattcttgg gctgaataa ttgcagtgc ttaacaggtt tggaccaagc tatgcaggtg</p> <p>acagagactc ttgggatgac gactgtctgc atcaacccca ctatctatgc ctttgtcggg</p> <p>gagaagtcca gaaactacct cttagtcttc ttccaaaagc acattgccaa acgttctgc</p> <p>aaatgctgtt ctattttcca gcaagaggct cccgagcgag caagctcagt ttacaccga</p> <p>tccactgggg agcaggaat atctgtgggc ttgtgacacg gactcaagtg ggctggtag</p> <p>ccagtcagag ttgtgacat ggcttagttt tcatacacag cctgggctgg ggtgggggtg</p> <p>ggagaggctt tttttaaaag gaagttactg ttatagaggg tctaagattc atccattat</p> <p>ttggcatctg ttttaagtag attagatctt ttaagcccat caattataga aagccaaatc</p>	Homo sapiens

352	6213	C-C Chemokine Receptor 5	NP_000570.1	MDYQVSSPIY DINYTSEPC QKINVKQIAA RLPLPLYSLV FIFGFGNML VILILNCKR P LKSMTDIYLL NLAISDLFFL LTVPFWAHYA AAQWDFGNTM CQLLTGLYFI GFFSGIFFII LFTIDRYLAV VHAUFALKAR TVTFGVVTSV ITWVAVFAS LPGIIFTRSQ KEGLHYTCSS HPYYSQYQFW KNFOTLKIVI LGLVLP LLVM VICYSGILKT LLRCRNEKKR HRAVRLIFTI MIVYFLFWAP YNIVLLNTEF QEFFGLNCS SSNRILDQAMQ VTETLGMTHC CINPIIYAFV GEKFRNYLLV FFQKHIARF CKCCSIFQOE APERASSVYT RSTGEQEISV GL	Homo sapiens
aaaatatgtt gatgaaaaat agcaaccttt ttatctcccc ttcatatgca tcaagtattt gacaaactct cccttcactc gaaagttcc ttatgtatat ttaaaagaaa gcctcagaga attgctgatt cttagtatta gtgactgaa cagaaatacc aaaattattt cagaaatgta caacttttta ctagtataa ggcaacatat aggttgtaaa tgtgtttaa acaggtcttt gtcttgctat ggggagaaa gacatgaata tgattagtaa agaaatgaca cttttcatgt gtgatttccc ctccaaggtg tggtaataa gtttcactga cttagaacca ggcgagagac ttgtggcctg ggagagctgg ggaagcttct taaatgagaa ggaattgag ttggtatcat tattgtggc aaagacagaa gcctcactgc aagcaactgca tgggcaagct tggctgtaga aggagacaga gctggttggg aagacatggg gaggaagac aaggtatgat catgaagaac cttgacggca ttgctccgtc taagtcata gctgagcagg gagatcctgg ttggtgttgc agaaggttta ctctgtggcc aaaggagggt caggaaggat gagcatttag ggcaaggaga ccaccaacag ccctcaggtc aggtgagga tggcctctgc taagctcaag gcgtgaggat gggaaggagg gaggtattcg taaggatggg aaggaggagg gtattcgtgc agcatatgag gatgcagagt cagcagaact ggggtggatt tggtttggaa gtgagggtca gagaggagtc agagagaatc ctagtcttc aagcagattg gaaaaacct tgaagaagaca tcaagcacag aaggaggagg aggaggttta ggtcaagaag aagatgatt ggtgtaaaa gatgggtctg gtttcagag cttgaacaca gtctcaccga gactccaggc tgtctttcac tgaatgcttc tgacttcata gatttcttc ccatccagc tgaataactg aggggtctcc aggaggagac tagatttatg aatacacgag gtatgaggtc taggaacata cttcagctca cacatgagat ctaggtagg attgattacc tagtagtcat ttcatgggtt gttgggagga ttctatgagg caaccacagg cagcatttag cacatactac acattcaata agcatcaaac tcttagttac tcattcaggg atagcactga gcaagcatt gagcaagggt gtcccatata ggtgagggaa gcctgaaaaa ctaagatgct gcctgcccag tgcacacaag ttaggtatc atttctgca ttaaccgtc aataggcaa ggggggaagg gacatattca ttggaaata agctgccttg agccttaaaa ccacaaaaa tacaattac cagctccgtt attcagact gaatgggggt ggggggggct ccttaggtac ttatccaga tgcctctccc agacaaacca gaagcaacag aaaaaatcgt ctctccctcc ctttgaatat aatatacccc ttagtgtttg ggtatatcca ttccaagggt agagagagag gtttttttct gttctttctc atatgattgt gcacatactt gagactgttt tgaatttggg gtaggctaa aaccatcata gtacaggtaa ggtgagggaa tagtaagtgg tgagaactac tcagggaatg aaggtgtcag aataataaga ggtgtactg actttctcag cctctgaata tgaacgtga gcattgtggc tgtcagcagg aagcaacgaa gggaaaatgc ttctctttt ctcttaagt gtggagagtg caacagtagc ataggacctt acctctggg ccaagtcaaa gacattctga catcttagta ttgcatatt cttatgtatg tgaaggttac aaattgcttg aagaaaaa tgcattcaat aaaaaacacc ttcta 					



353	6363	Chemokine (C-C motif) Receptor- Like 2 (CCRL2)	NM_003965	<p>tctgtctgtg gggaagtggg cacacgttaa aagaaatgtt tatttcagtc ttctgaaata A</p> <p>gggaattact ctggctaaaa tgtagctcca gaaagggaaa gtggggctgt atgaatccag</p> <p>gtccagtttg ttgttctctc caggataagg cagctgtcgg agggaaaaat catctcccat</p> <p>ttctccacag ggcagtctga agatggccaa ttacacgctg gcaccagagg atgaatatga</p> <p>tgctctcata gaaggtgaac tggagagcga tgaggcagag caatgtgaca agtatgacgc</p> <p>ccaggcactc tcagcccgagc tggcgccatc actctgctct gctgtgttg tgatcggtgt</p> <p>cctggacaat ctctgtgttg tgcttatctt ggtaaaatat aaaggactca aacgcgtgga</p> <p>aaatatctat ctctaaact tggcagtttc taacttgtgt ttcttgctta cctggccctt</p> <p>ctgggtctcat gctgggggag atcccatgtg taaaattctc attggactgt acttcgtggg</p> <p>cctgtacagt gagacatttt tcaattgcct tctgactgtg caaaggtacc tagtgttttt</p> <p>gcacaagggc aactttttct cagccaggag gaggtgccc tgtggcatca ttacaagtgt</p> <p>cctggcatgg gtaacagcca ttctggccac ttgtgctgaa tacgtgggtt ataaacctca</p> <p>gatggaagac cagaaataca agtgtgcatt tagcagaact ccttctctgc cagctgatga</p> <p>gacattctgg aagcattttc tgacttttaa aatgaacatt tcggttcttg tcttccccct</p> <p>atttattttt acatttctct atgtgcaaat gagaaaaaca ctaaggttca gggagcagag</p> <p>gtatagcctt ttcaagcttg tttttgccat aatggtagtc ttcttctga tgtgggcgccc</p> <p>ctacaatatt gcatttttcc tgtccacttt caaagaacac ttctccccga gtgactgcaa</p> <p>gagcagctac aatctggaca aaagtgttca catcactaaa ctcatcgcca ccaccactg</p> <p>ctgcatcaac cctctctctg atgcgtttct tgatgggaca tttagcaaat acctctgccg</p> <p>ctgtttccat ctgctgtagta acaccccat tcaacccagg gggcagctcg cacaaaggcac</p> <p>atcgagggaa gaacctgacc atccaccga agtgtaaac agcatccacc aaatgcaaga</p> <p>agaataaaca tggattttca tctttctgca ttatttcattg taaattttct acacatttgt</p> <p>atacaaaatc ggatacagga agaaaagga gaggtgagct aacatttgtct aagcactgaa</p> <p>tttgtctcag gcacctgca aggtcttcta caaacgtgag ctctctcgcc tcttaccact</p> <p>tgtccatagt tggatagga tagtctctat ttctctgaga agaaaactaa ggcgcggaaa</p> <p>tttgtctaag atcacataac taggaagtgg cagaactgat tctccagccc tggtagcatt</p> <p>tgctcagagc ctacgcttgg tccagaacat caaactccaa accctgggga caaacgacat</p> <p>gaaataaatg tatttataaa catct</p>	Homo sapiens
354	6363	Chemokine (C-C motif) Receptor- like 2 (CCRL2)	NP_003956.1	<p>LILVKYKGLK RVENIYLNL AVSNLCFLT LPFWAHAGGD PMCKILIGLY FVGLYSETFF</p> <p>NCLLTVQRYL VFLHKGNEFS ARRVPCGII TSVLAWVTAI LATLPEYVVY KPQMEDQKYK</p> <p>CAFSRTFPLP ADETFWKHFL TLKMNISLV LPLFIETFLY VQMRKTLRFR EQRYSLFKLV</p> <p>FAIMVFLIM WAPYNIAFFL STFKEHFSLS DCKSSYNLDK SVHITKLIAT THCCINPLLY</p> <p>AFLDGTFSKY LCRCFHLRSN TPLQPRGQSA QGTSREEPDH STEV</p>	Homo sapiens
355	6446	Pael Receptor (GPR37)	NM_005302	<p>atgcgagccc cgggcgcgct tctgcgccgc atgtcgcggc tactgcttct gctactgctc A</p> <p>aaggtgtctg cctcttctgc cctcggggtc gccctgcgct ccagaaacga aacttgtctg</p> <p>ggggagagct gtgcacctac agtgatccga gcgcgcggca gggacgcctg gggacccggga</p> <p>aattctgcaa gagacgttct gcgagcccca gcacccaggg aggagcaggg ggcagcgttt</p> <p>cttgccggac cctctctgga cctgcccggc gcccccggcc gtgacccggc tgcagggcaga</p> <p>ggggcgaggc cgtcggcagc cggacccccc ggacctccaa ccaggccacc tggccccctgg</p> <p>aggtggaaaag gtgctcgggg tcaggagcct tctgaaactt tggggagagg gaacccccacg</p>	Homo sapiens

356	6446	Pael Receptor (GPR37)	NP_005293.1	<p>gacctccagc tcttctctca gatctcagag gaggaagaga aggggtccca aggcgtggc  atctccggc gtagccagga gcagagtgtg aagacagtcc ccggagccag cgatctttt  tactggccaa ggagagccgg gaaactccag ggttccacc acaagccct gtccaaagc  gccaatggac tggcggggca cgaagggtgg acaattgcac tcccgggccc ggcgtggcc  cagaatggat ccttgggtga aggaatccat gagcctggg gtccccggc gggaacagc  acgaaccggc gtgtgagact gaagaacccc ttctaccgc tgaccaggga gtctatgga  gcctacggcg tcatgtgtct gtccgtgggtg atcttcggga ccggcatcat tggcaacctg  gcggtgatgt gcatcgtgtg ccacaactac tacatgcgga gcatctccaa ctccctcttg  gccaacctgg ccttctggga cttctctc atcttcttct gccttccgct ggtcatcttc  cacgagctga ccaagaagtg gctgtggag gacttctct gcaagatcgt gccctatata  gaggtcgctt ctctgggagt caccacttc accttatgtg ctctgtgcat agaccgcttc  cgtgctgcca ccaacgtaca gatgtactac gaaatgatcg aaaactgttc ctcaacaact  gccaaacttg ctgttatatg ggtggagct ctattgttag cacttccaga agttgttctc  cgccagctga gcaaggagga ttgggggtt agtggccgag ctccggcaga aagtgcat  attaagatct ctctgattt accagacacc atctatgttc tagccctcac ctacgacagt  gcgagactgt ggtggtattt tggctgttac tttgtttgc ccacgctttt caccatcacc  tgctctctag tgactgcgag gaaatccgc aaagcagaga aagcctgtac ccgagggaat  aaacggcaga ttcaactaga gactcagatg aactgtacag tagtggcact gaccatttta  tatggatttt gcattattcc tgaaatatac tgaacattg ttactgccta catggctaca  gggggtttcac agcagacaaat ggacctcctt aatatcatca gccagtctct tttgttcttt  aagtcctgtg tcaccccaat cctccttttc tgtctctgca aacctttcag tcgggacctc  atggagtgtc gctgctgttg ctgtgaggaa tgcattcaga agtcttcaac ggtgaccagt  gatgacaatg acaacgagta caccacggaa ctgcaactct cgcctttcag taccatacgc  cgtgaaatgt ccacttttgc tctgtcggga actcattgct ga</p>	Homo sapiens
357	6536	Putative Neurotransmitter Receptor (PNR)	NM_003967	<p>atgagagctg tcttcatcca aggtgctgaa gagcaccctg cggcattctg ctaccaggtg A  aatgggtctt gcccaggac agtatact ctgggcatcc agttggtcat ctacctgacc  tgtgcagcag gcatgctgat tatcgtgcta gggaatgtat ttgtggcatt tgcgtgtcc  tacttcaaa cgcttcacac gccaccaac ttctgtctgc tctccctggc cctggctgac  atgtttcttg gtctgtgtgt gctgccccctc agcaccattc gctcagtga gactgctgg  ttcttcgggg acttctctctg ccgctgcac acctacctgg acacctctt ctgctcacc</p>	Homo sapiens

358	6536	Putative Neurotransmitter Receptor (PNR)	NP_003958.1	<p> tccatcttcc atctctgttt catttcatt gacggccact gtgccatctg tgacccccctg  ctctatccct ccaagttcac agtgagggtg gctctcaggt acatctctggc aggatggggg  gtgccgcag catacattc gttattcttc tacacagatg tggtagagac aaggtcagc  cagtggctgg aagagatgcc tttgtgtggc agttgcccag tgcgtctcaa taaattttgg  ggctgggttaa acttcccttt gttctttgtc cctgcctca ttatgtcag cttgtatgtg  aagatctttg tggttgctac cagacaggct cagcagattt ccaattgag caaagcctg  gctggggctg ccaagcatga gagaaaagct gccaagacct tgggcatgtg tgtgggcata  tacctcttgt gctggctgcc cttaccata gacacagatg tgcacagcct cttcaccttt  atcacacccc cactggcttt tgacatcttt atctgggttg cttacttcaa ctcagcctgc  aaccccatca tctatgtctt ttctaccag tggtttggga aggcactgaa actcacactg  agccagaagg tcttctacc gcagacacgc actgttgatt tgtaccaaga atga  MRAVFIQGA EHPAFCYQV NGSCPRTVHT LGIQLVIYLT CAAGMLIIVL GNVFAFAVS P  YFKALHTPTN FLILLSALAD MFLGLLVLP STIRSVESCW FFGDFLCRLH TYLDTLFLCLT  SIFHLCFISI DRHCAICDPL LYPSTFTVRV ALRYILAGWG VPAAYTSLFL YTDWETRLS  QWLEEMPCVG SCQLLNKFW GWLNFPLFFV PCLIMISLYV KIFVAVTRA QOITTLKSLS  AGAAKHERKA AKTLGIVVGI YLLCWLPTFI DTNVDLSLLHF ITPPLVFDIF IWFAYFNSAC  NPIIYFSYQ WFRKALKITL SQKVFSPQTR TVDLIYQE </p>	Homo sapiens
359	6777	G Protein- Coupled Receptor TM7SF1	NM_003272	<p> cggcgcatg cgcggagacc cccgcggggg cggcgggcgc cgtgagcccc gatgaggccc A  gagcgtcccc ggcgcggcgg cagcgcgcgc ggcgcgatgg agacccgcc gtgggaccca  gcccgcaacg actcgtctgc gccacgctg acccggcgcg tgcgcccta cgtgaagctt  ggcctcaccg tgcgtcacac cgtgttctac cgtgtgtctc tgcgtgtcat ctacgtgcag  ctctggctgg tgcgtcggtta ccgccacaag cgggtcagct accagagcgt ctctctctt  ctctgacctt tctggcctc cctgcggacc gtctctcttct cctctactt caaagacttc  gtggcgccca attcgtctcag cccctctgtc tctgtgtctg tctactgctt cctgtgtgc  ctgcagtttt tcacctcac gctgatgaac ttgtacttca cgcaggtgat ttccaagcc  aagtcacaaat attctccaga attactcaaa taccgggtgc cctctacct ggcctccctc  ttcatcagcc ttgttttctt gtgtgtgaat ttaacctgtg ctgtgctggt aaagacggga  aatggggaga ggaaggttat cgtctctgtg cgagtggcca ttaatgacac gctctctgtg  ctgtgtgccg tctctctctc catctgtctc tacaataatc ctaagatgtc cttagccaac  attacttgg agtccaaggg ctctctcgtg tgtaaatga ctgccatcgg tgtcaccgtg  atactgcttt acacctctg ggcctgctac aacctgttca tctgtctatt tctcagaac  aagagcgtcc attcctttga ttatgactgg tacaatgtat cagaccaggc agatttgaag  aatcagctgg gagatgctgg atactatta ttgtgagtgg tgttatttgt ttgggaactc  ttacctacca ccttagtctg ttatttcttc cgagttagaa atctacaaa ggaccttacc  aacctggaa tgggtccocag ccattggattc agtccagat cttatttctt tgacaacctt  cgaagatatg acagtgtatga tgaccttggc tggaaacttg cccctcaggg acttcaggga  ggttttgtct cagattacta tgattgggga caacaaacta acagcttctt ggcacaagca  ggaaactttgc aagactcaac ttgtgatcct gacaaaccaa gccttgggta gcatcagtta  acagttttat ggacgattcc tcagatgaaa agcttcagaa aagcttagtg acagctgaat  ttttagggca cttttcttta agaaatagaa cttgattttt attgtttaca ggtttccaat  ggccccatag gaataagcaa taatgtagac tgataaaccc ttattttagt actaaagagg </p>	Homo sapiens

360	6777	G Protein- Coupled Receptor TM7SF1	NP_003263.1	MRPERPRRG SAPGPMETPP YVQLWLVLRY RHKRLSYQSV PVCLQFFTLT LMNLYFTQVI KTGNERKVI VSVRVAINDT VTVILLYTSR ACYNLFILSF WELLPITLW YFFRVRNPTK LQGGFAPDYY DWGQQTNSFL	WDPARNDSLP PTLTPAVPPY VKLGLTVVYT	VFYALLFVFI P	Homo sapiens				
361	6853	Purinerbic Receptor P2Y11	NM_002566	atggatcgag gtgccaagtc ctgccctgcc aacttcttgg cagctgccga cgacaaactc A agtgggttcc agggggactt cctgtggccc atactgttggt ttgagttcct ggtggccgtg gccagcaatg gcctggccct gtaccgcttc agcatccgga agcagcgccc atggcacccc gccgtggctt tctctgtcca gctggcagtc agcagactgc tctgcgctct gacgtgccc ccgtggccg cctacctcta tcccccaa cactggcgct atggggaggc cgggtggcgc ctggagcgct tctcttcac ctgcaacctg ctggcgagcg tcacttctcat cactgcatc agcctcaacc gctacctggg catcgtgcac ccttctctcg cccgaagcca cctgcgaccc aagcacgctt gggcctgtgag cgtgcggcg tggtctctgg cagcagggg cgggcaactg cagcgtggcc acactcagct tctccacct gaagaggcg cagcagagcc acgggctggc ggcctacaga aggcccgagg cctgcatcaa gtgtctgggg cagcagagcc acgggctggc ggcctacaga gcgtatagcc tgggtctggc ggggttggg tgcggcctgc cgtgtctgt cagcgtggca gcctacggcg cctcggggcg ggcctgtgta cgcagcccg gcatgactgt ggcgagaag ctgctgtgg cagcgttgggt ggcagtggtt gtggccctct acgccagctc ctatgtgccc taccacatca tgcgggtgct caactggat gctcggcggc gctggagcac ccgtgccc agctttgcag acatagccca ggcacagca gcccctggagc tggggcccta cgtgggctac caggtgatgc ggggcctcat gcccctggcc ttctgtgtcc acccttact ctacatggcc gcagtggcca gcctgggctg ctgctgcga cactgcccc gctacagga cagctggaaac ccagaggacg ccaagagcac tggccaagcc ctgccccca atgccacagc cgccccctaaa ccgtcagagc cccagtcagg tgagctgagc caatga							Homo sapiens
362	6853	Purinerbic Receptor P2Y11	NP_002557.1	MDRGAKSCPA NFLLAADDKL SGFQGFDFLWP ILVVEFLVAV ASNGLALYRF SIRQRPWHP P AVVFSVQLAV SDLLCALITP PLAAALYPPK HWRYGEAAR LERFLTCTNL LGSVIFITCI SLNRYLGIVH PFFARSHLRP KHAWAVSAAG WFLAALLAMP TLFSEHLKRP QQGAGNCSVA RPEACIKCLG TADHGLAAYR AYSLVLGLG CGLPLLLTLA AYCALGRAVL RSPGMTVAEK LRVAALVASG VALYASSYVP YHIMRVLNVD ARRWRSTRCP SFADIAQATA ALELGPYVGY				Homo sapiens			

363	6921	G Protein- Coupled Receptor GPR39	NM_001508	QVMRGLMPLA FCVHPLLYMA AVPSLGCCCR HCPGYRDSWN PEDAKSTGQA LPLNATAAPK PSEFQSRELS Q	atggcttcac ccagcctccc gggcagtgac tgctcccaaa tcattgatca cagtcagtgc A cccgagtttg aggtggccac ctggatcaaa atcacccctta ttctggtgta cctgatcatc ttcgtgatgg gccctctggg gaacagcgcc accattcggg tcaccacaggt gctgcagaag aaagataact tgcagaagga ggtgacagac cacatggtga gtttggcttg ctcggacatc ttggtgttcc tcatcggcac gcccatggag ttctacagca tcacttgaa tccctgacc acgtccagct acacccctgc ctgcaagctg cacactttcc tcttcgaggc ctgcagctac gttacgctgc tgcacgtgct gacactcagc tttagcgctt acatcgccat ctgtcacccc ttcagggtaca aggetgtgc gggaccttgc cagtgaaagc tgctgattgg ctctgcttgg gtcacctccg cctggtggc actgcccctg ctgtttgcca tgggtactga gtacccccctg gtgaacgtgc ccagccaccg ggtctcact tgcaaccgct ccagcacccg ccaccacgag cagcccgaga cctccaatat gtccatctgt accaacctct ccagccgctg gaccgtgttc cagtcacagca tcttcggcgc cttcgtggtc tacctcgtgg tcttgccttc cgtagccttc atgtgctgga acatgatgca ggtgctcatg aaagccaga agggctcgtc ggcggggggc acggggcctc cgcagctgag gaagtcgag agcgaagaga gcaggaccgc caggaggcag accatcatct tcctgaggtc gattgtgtg acattggcgg tatgctggat gcccaaccag attcggagga tcattggtgc ggccaaacc aagcacgact ggacgaggtc ctacttcggg gcgtacatga tctctctccc cttctcggag acgtttttct acctcagctc ggtcatcaac ccgctcctgt acacggtgtc ctgcagcag ttctcggcgg tgctcgtgca ggtgctgtgc tgccgctgt cgtgcagca cgcacaacc gagaagcgc tgcgcgtaca tgcgactcc accaccgaca gcgccgctt tgtgcagcg ccgttgcctc tgcgctccc gcgccagtcc tctgcaagga gaactgagaa gattttctta agcacttttc agagcagggc cgagccccag tctaagtccc agtcattgag tctcagatca ctagagccca actcagggcg gaaaccagcc aattcgtcg cagagaatgg ttttcaggag catgaagttt ga	Homo sapiens
364	6921	G Protein- Coupled Receptor GPR39	NP_001499.1	MASPSLPGSD CSQIIDHSHV PEFEVATWIK ITLILVYLI FVMGLLGNSA TIRVTQVLQK P KGYLQKEVTD HNVSLACSDI LVFLIGMPME FYSIIWNPLT TSSYTLSCKL HTFLFEACSY ATLLHVLTL FERYIAICHP FRYKAVSGPC QVKLLIGFVW VTSALVALPL LFAMGTEYPL VNVPSHRGLT CNRSSTRHHE QPETSNSMIC TNLSSRWTFV QSSIFGAFV YLVVLLSVAF MCWNMMQVLM KSQKSLAGG TRPPQLRKSE SEESRTARRQ TIIFRLIV TLAVCWMPNQ IRRIMAAKP KHDWTRSYFR AYMILLPFE TFFYLSSVIN PLYTVSSSQ FRRVFQVLC CRLSLQHANH EKRLRVHAHS TTDSARFVQR PLLEFASRRQS SARRTEKIFL STFQSEAEQ SKSQSLLES LEPNSGAKPA NSAAENGFEQ HEV	atggcttcac ccagcctccc gggcagtgac tgctcccaaa tcattgatca cagtcagtgc A cccgagtttg aggtggccac ctggatcaaa atcacccctta ttctggtgta cctgatcatc ttcgtgatgg gccctctggg gaacagcgcc accattcggg tcaccacaggt gctgcagaag aaagataact tgcagaagga ggtgacagac cacatggtga gtttggcttg ctcggacatc ttggtgttcc tcatcggcac gcccatggag ttctacagca tcacttgaa tccctgacc acgtccagct acacccctgc ctgcaagctg cacactttcc tcttcgaggc ctgcagctac gttacgctgc tgcacgtgct gacactcagc tttagcgctt acatcgccat ctgtcacccc ttcagggtaca aggetgtgc gggaccttgc cagtgaaagc tgctgattgg ctctgcttgg gtcacctccg cctggtggc actgcccctg ctgtttgcca tgggtactga gtacccccctg gtgaacgtgc ccagccaccg ggtctcact tgcaaccgct ccagcacccg ccaccacgag cagcccgaga cctccaatat gtccatctgt accaacctct ccagccgctg gaccgtgttc cagtcacagca tcttcggcgc cttcgtggtc tacctcgtgg tcttgccttc cgtagccttc atgtgctgga acatgatgca ggtgctcatg aaagccaga agggctcgtc ggcggggggc acggggcctc cgcagctgag gaagtcgag agcgaagaga gcaggaccgc caggaggcag accatcatct tcctgaggtc gattgtgtg acattggcgg tatgctggat gcccaaccag attcggagga tcattggtgc ggccaaacc aagcacgact ggacgaggtc ctacttcggg gcgtacatga tctctctccc cttctcggag acgtttttct acctcagctc ggtcatcaac ccgctcctgt acacggtgtc ctgcagcag ttctcggcgg tgctcgtgca ggtgctgtgc tgccgctgt cgtgcagca cgcacaacc gagaagcgc tgcgcgtaca tgcgactcc accaccgaca gcgccgctt tgtgcagcg ccgttgcctc tgcgctccc gcgccagtcc tctgcaagga gaactgagaa gattttctta agcacttttc agagcagggc cgagccccag tctaagtccc agtcattgag tctcagatca ctagagccca actcagggcg gaaaccagcc aattcgtcg cagagaatgg ttttcaggag catgaagttt ga	Homo sapiens
365	7221	Galanin Receptor GalR2	NM_003857	ggacaggtgc ccgggagct tcccgctcgc gaagaccag acggctgcag gagccgggc A agcctcgggg tcagcggcac catgaacgtc tcgggctgcc caggggcccg gaacgcgagc cagggcgggc gcgggggagg ctggcacccc gaggggtca tcgtgcccc gctcttcgcg ctcatcttcc tcgtggggcac cgtgggcaac acgctggtgc tggcggtgct gctgcgggc ggccaggcgg tcagcactac caacctgttc atcttaacc tggcgctggc cgacctgtgt ttcatcctgt gctgcgtgcc ctccaggcc accatctaca ccctggacgg ctgggtgttc ggctcgtgc tgtgcaaggc ggtgcacttc ctcatcttcc tcaccatgca cgccagcagc ttcacgctgg ccgccgtctc cctggacagg tatctggcca tccgctacc gctgcactcc	Homo sapiens	

366	7221	Galanin Receptor GalR2	NP_003848.1	<p>cgcgagctgc gcacgcctcg aaacgcgctg gcagccatcg ggctcatctg ggggctgtcg  ctgtcttctt cggggcccta cctgagctac taccgccagt cgcagctggc caactcgacc  gtgtgccatc ccgctggag cgcctctgc cgcgcgcga tggacatctg caactctgtc  ttcagtaacc tgcctctgt gctggtctc ggcctgacct acgcgcgac cttgcgctac  ctctggcgcg ccgtcgaccc ggtggccgcg ggtcggggtg cccggcgcg caagcgcaag  gtgacacgca tgatctctat cgtggccgcg ctcttctgcc tctgtctggt gcccaccac  gcgtctatcc tctgcgtgtg gttcgccag ttcgcgtca cgcgcgccac ttatgcgctt  cgatctctct cgcacctggt ctctacgcc aactctgog tcaaccccat cgtttacgcg  ctggtctcca agcacttccg caaaggcttc cgcagatct ggcggggcct gctggggcctg  gccccaggcc gagcctcggg ccgtgtgtgc gctgcgcgc ggggcaccca cagtggcagc  gtgttgagc gcgagtcag cgcctgttg cacatgagc agcgggcggg ggccttctgt  ccctgccccg gcgcttccca gccatgcac ctcgagccct gtcctggccc gtcctggcag  ggcccaagg caggcgacag catcctgacg gttgatgtgg cctgaaagca cttagcgggc  gcgctgggat gtcacagagt tggagtcatt gttgggggac cgtggggcg</p>	LRGQAVSTT P VFHLIFLTMH ASSETLAASV LSYRQSQLA NLTVCHPAWS VAAGSGARRA KRKVTRMILI SYANSCVNPI VYALVSKHFR DLHMSEAAAG ALRCPGASQ	Homo sapiens
367	7246	Orexin Receptor 1	NM_001525	<p>cctccctca ggaagttag gctgagacc cgaagagacc tgggtgcaag cctccaggca A  ccctgaagg agtgggctga gggctggccc aagctccctc ctctccctct gtagagccta  ggatgcccc ctgctgcagc ggtcctctgag ctcatggagc cctcagccac ccagggggcc  cagatggggg tcccccttg cagcagagag ccgtcccttg tgcctccaga ctatgaagat  gagttctcc gctatctgtg gcgtgattat ctgtaccaca aacagtatga gtggtcctc  atcgagcct atgtgctgt gttcgtctg gccctggtgg gcaacacgct ggtctgcctg  gccgtgtggc ggaaccacca catgaggaca gtcaccaact acttcattgt caacctgtcc  ctggctgacg ttctggtgac tgctatctgc ctgcggcca gctgctggt ggacatcact  gagtcctggc tgttcggcca tgcctctgc aaggtcatcc cctatctaca ggtgtgtcc  gtgtcagtg cagtgtaac tctcagcttc atgcctctgg accgtggtg tgcctctgc  caccactat tgttcaagag cacagccccg cgggccctg gctccatctt gggcatctgg  gctgtgtgc tggccatcat ggtgccccag gctgagtcga tggaaatgcag cagtgtgctg  cctgagctag ccaaccgcac acggtctctc tcagttctgt atgaacgctg ggcagatgac  ctctatccca agatctacca cagtgtcttc ttatgttca cctacctggc cccactggg  ctcatggcca tggcctattt ccagatattc cgaagctct gggccgcca gatccccggc  accacctcag cactggtgag gaactggaag cgcctctcag accagctggg gacctggag  cagggcctga gtggagagcc ccagccccg ggcggcctt tcctggctga agtgaagcag  atgcgtgcac ggaggaagac agccaagatg ctgatgttg gctgctggt cttcgccctc  tgctacctgc ccatcagcgt cctcaatgtc cttaaagagg tgttcgggat gttccgcca  gccagtgacc gcgaagctgt ctacgcctgc ttcacctct cccactggct ggtgtacgac</p>	ILTVDA RVCAAAARGTH SGVLERESS LRYLWRAVDP VAAGSGARRA YALRILSHLV SYANSCVNPI FGQFPLTRAT YALRILSHLV LVLGLTYART YALRILSHLV TFVFSYLLPV LVLGLTYART PHALILCWV FGQFPLTRAT LGRAPGRASG RVCAAAARGTH SWQPKAGDS ILTVDA	Homo sapiens

368	7246	Orexin Receptor 1	NP_001516.1	MEPSATPGAQ MGVPVPSREP SPVPDYEDE FLRYLWRDYL YPKQYEWVLI AAYVAVFVVA P LVGNTLVCLA VWRNHMRTV TNYFIVNLSL ADVLVTAIL PASLLVDITE SWLFQHALCK VIPYLOAVSV SVAVLTLSFI ALDRWYAICH PLLEFKSTARR ARGSIILGIWA VSLAIMVPOA AVMECSSVLP ELANRTRLES VCDERWADDL YPKIYHSCFF IVTYLAPLGL MAMAYFQIFR KLWGRQIPGT TSALVRNWK R PSDQLGDLEQ GLSGEPQPRG RAFLAEVKQM RARRKTAKML MNVLLVFALC YLPISVLNVL KRVEGMRQA SDREAVYACF TFSHWLVYAN SAANPIIYNF LSGKFREQFK AAFSCCLPGL GPCGSLKAPS PRSSASHKSL SLQSRCSISK ISEHVVLTSV TTVLP	Homo sapiens
369	7247	Orexin Receptor 2	NM_001526	gggggggggg taattgagct tcaagttagc cggacgtagc tttctctctcc tgggtgtcatt A gtgcagcct ccagtgccgg gtccctagtt cctcagctgc ctatcttccc ggtgcaacat cgctgtaaa gacagcaag ccaccgcaga agttgcccgg cagaagactc cggaggcatt ggctcagtaa cttttcacgt cttttctgc tcgggagccc cttctagcct ctccgcgcag cctttccac cgcaaatcac cagtgtcat ggggcaggcg gagaggagct tgcagcattg agcggaaccg gacttgagcc cgtgatgtcc ggcaccaaat tggaggactc cccccctgt cgcaactggt catctgcttc ggagctgaat gaaactcaag agcccttttt aaacccacc gactatgacg acgaggaatt cctgcggtac ctgtggagg aatacctgca ccgaaaagaa tatgagtggg tcctgatcgc cgggtacatc atcgtgttcg tcgtggctct cattgggaac gtcctggtt gtgtggcagt gtggaagaac caccacatga ggacggtaac caactactc atagtcatac tttctctggc tgatgtgctc tgaccatca cctgccttcc agccacactg gtcgtggata tcactgagac ctggtttttt ggacagtccc tttgcaaat gattccttat ctacagaccg tgcggtgtc tgtgtctgtc ctacactga gctgtatcgc ctgggatcgg tggtatgcaa tctgtcacc tttgatgttt aagagcacag caaagcgggc ccgtaacagc attgtcatca tctggattgt ctctgcatt ataattgatt ctcaggccat cgtcatggag tgacgaccg tgtccccagg cttagccaat aaacccacc tctttacggt gtgtgatgag cgctggggtg gtgaaattta tcccaagatg taccacatct gttcttttct ggtgacatac atggcaccac tgtgtctcat gtgtgtggct tatctgcaa ttttcgcaa actctggtgt cgacagatcc ctggaacatc atctgtagt ctgagaaaat ggaagccccct gcagcctggt tcacagcctc gagggccagg acagccaacg aagtcgccga tgaagcctgt ggcgctgaa ataaagcaga tccgagccag aagaaaaca ccccgagtg tgatggtgt gcttttggt tttgcaattt gctatctacc aattagcatc ctcaatgtgc taaagagagt atttgggatg tttgcccata ctgaagacag agagactgtg tatgcctgtg ttacctttt acactggctt gtatatgcca atagtctgc gaatccaatt attataatt ttctcagtgg aaaatttga gaggaaattta aagctgcgtt ttctgtctgt tgccttggag ttccaccatcg ccaggaggat cggtcacca ggggacgaac tagcacagag agccggaagt ccttgaccac tcaaatcagc	Homo sapiens

370	7247	Orexin Receptor 2	NP_001517.1	<p>aactttgata acatatcaaa actttctgag caagttgtgc tcaactagcat aagcacactc ccagcagcca atggagcagg accacttcaa aacttgtaga atatttattc atatgacaag gatacctgag taaaactatc ctttttaaaa tcactgggaa cagaaatttt attatcctat gatgtgaagc taaaattact tgtggatctt tttttttttt aatctattgc tctttggaaa taaaaaaaa gtcagtttaa aatgaaaaaa aaaaaaaa aaa</p> <p>MSGTKLEDSP PCRNWSSASE LNETQEPFLN PTDYDDEEFL RYLWREYLHP KEYEWVLIAG P YIIVFVALI GNVLCVAVW KNHMRVTN YFIVNLSLAD VLVTITCLPA TLVVDITETW FFGQSLCKVI PYLQIVSVSV SVLTLSIAL DRWYAICHL MEKSTAKRAR NSIVIIWIVS CIIMIPQAI MECSTVFPGL ANKTTLETV DERWGEIYP KMYHICFELV TYMAPLCLMV LAYLIQIFRL WCRQIPGTSS VVQRKWKPLQ PVSQPRGPQ PTKSRMSAVA AEIKQIRARR KTARMIMVVL LVFAICYLPI SILNVLKRVF GMEFHTEDRE TVYAWFTFSH WLVIYANSAAN PIIYNFLSGK FREEFKAAFS CCCLGVHHRQ EDRLTRGRTS TESRKSLLTQ ISNFDNISKL SEQVLTIS TLPAANGAGP LQNW</p>	Homo sapiens
371	8436	Platelet- Activating Factor Receptor	NM_000952	<p>ccagctgata ttccagccca cagcaatgga gccacatgac tctccacaca tggactctga A gttccgatac actctcttcc cgattgttta cagcatcacc tttgtgtcg ggtcattgc taatggctac gtgctgtggg tctttgccc cctgtaccct tgcaagaaat tcaatgagat aaagatcttc atggtgaacc tcaccatggc ggacatgctc tcttgatca cctgcccact ttggattgtc tactacaaa accagggcaa ctggatactc cccaaattcc tgtgcaacgt ggctggctgc cttttcttca tcaacaccta ctgctctgtg gccttcttgg gcgtcatcac ttataaccgc ttccaggcag taactcggcc catcaagact gctcaggcca acaccgcaa gcgtggcatc tctttgtcct tggtcactcg ggtggccatt gtgggagctg catcctactt cctcatcctg gactctacca acacagtgc cgacagtgtc ggctcaggca acgtcactcg ctgctttgag cattaagaga agggcagcgt gccagtcctc atcatccaca tcttcatcgt gttcagcttc ttcttggtct tctcatcat cctctctgc aacctgtga tcatccgtac cttgctcatg cagccggtgc agcagcagcg caacgtgaa gtcaagcgcc gggcgctgtg gatgggtgc acggtcttgg cgggtgttcat catctgcttc gtgcccacc acgtggtgca gctgcccgg acccttgctg agctgggctt ccaggacagc aaattccacc aggccattaa tgatgcacat caggtcacc tctgctctct tagcaccaac tgtgtcttag accctgttat ctactgttc ctcaccaaga agttccgcaa gcacctcacc gaaaagtctt acagcatgcg cagtagccgg aaatgctccc gggccaccac ggatacggtc actgaagtgg ttgtgccatt caaccagatc cctggcaatt cctcaaaaaa ttagtcttgg cttc</p> <p>MEPHDSSHMD SEFRYTLFPI VYSIIFVLGV IANGYVLWVF ARLYPCKKEN EIKIFMVNLT P MADMLFLITL PLWIVYYQNQ GNWILPKFLC NVAGCLFFIN TYCSVAFGLV ITYNRFQAVT RPIKTAQANT RKRGISLSLV IWVAIVGAAS YFLILDSTNT VPDSAGSGNV TRCFEHYEKG SVPVLIHIF IVFSFFLVFL IILFCNLVII RTLLMQPVQQ QRNAEVKRRRA LWMVCTVLAV FIICFVPHV VQLPWTIAEL GFQDSKFHOA INDAHQVTLIC LLSTNCVLDL VIYCFLTKKF RKHLTEKFYS MRSSRKCSRA TTDVTVEVV PFNQIPGNSL KN</p>	Homo sapiens
372	8436	Platelet- Activating Factor Receptor	NP_000943.1	<p>caaccagatc cctggcaatt cctcaaaaaa ttagtcttgg cttc</p> <p>MEPHDSSHMD SEFRYTLFPI VYSIIFVLGV IANGYVLWVF ARLYPCKKEN EIKIFMVNLT P MADMLFLITL PLWIVYYQNQ GNWILPKFLC NVAGCLFFIN TYCSVAFGLV ITYNRFQAVT RPIKTAQANT RKRGISLSLV IWVAIVGAAS YFLILDSTNT VPDSAGSGNV TRCFEHYEKG SVPVLIHIF IVFSFFLVFL IILFCNLVII RTLLMQPVQQ QRNAEVKRRRA LWMVCTVLAV FIICFVPHV VQLPWTIAEL GFQDSKFHOA INDAHQVTLIC LLSTNCVLDL VIYCFLTKKF RKHLTEKFYS MRSSRKCSRA TTDVTVEVV PFNQIPGNSL KN</p>	Homo sapiens
373	8509	G Protein- Coupled Receptor Ls8509	NM_007223	<p>tggggcgctc ctccttcgtc cccgcccgcc tgtcaagctg tgttctagcg gccgaggac A cgaggggggc taagaaagg ggcgcccagc catgcagagc caaaaaggcg ctgcgggaacg gggtcccccgt cgccagtgtc gaggcaggag gtcggagcca caagtgagg gctgggaagc aggaccagc acgggcgtct tggcaggcgg ccgggcgcag ggcaggctg ctggggacgc</p>	Homo sapiens



tcaggggcttt ccaccaagc catgggcgct gtcgggcact cggggggtccc ctctgtggctc  
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agtgtcctct ttattgagg agtatatga tccatctcag tgatccatgt ccttagtgaa  
gtccacatta ttctctgtgg ggacaagagc tgggcagttt tgaatgggtc ttgaggtggg

374	8509	G Protein- Coupled Receptor Ls8509	NP_009154.1	<p> taccocatgt gcactttctg aggatgcctc acttccctgg gctctgcaga gaacacacag  agagaagact ttcagagctc acaggagcag ggagcaggag cactctaagg gaattc  MGHNGSWISP NASEPHNASG AEAAGVNRSA LGEFGEAQLY RQFTTTVQVV IFIGSLGNF P  MVLWSTCRIT VKFSVTNRFI KNLAGSGICA SLVCVPFDII LSTSPHCCWW IYTMFLCKVV  KFLHKVFCVS TILSFPAIAL DRYYSVLYPL ERKISDAKSR ELVMYIWAHA VVASVPVFAV  TNVADIYATS TCTEWSNSL GHLVVVIVYN ITTVIVPVVV VFLELILIRR ALSASQKKKV  IIAALRTPQN TISIPYASQR EAEHATLLS MMVFILCSV PYATLVVYQT VLNVPDTSVF  LLLTAVWLPK VSLLANPVL LTVNKSVRKC LIGTLVOLHH RYSRRNVVST GSGMAEASLE  PSIRSGSOLL EMFHIGQQQI FKPTEDDEES EAKYIGSADF QAKEIFSTCL EGEQGPQFAP  SAPPLSTVDS VSQVAPAAPV EPETFPDKYS LQFGFGPFEL PPQWLSETRN SKKRLPLPLG  NTPEELIQTK VPKVGRVERK MSRNKNKVSIF PKVDS </p>	Homo sapiens
375	8896	Neuropeptide Y Receptor Type 6 Pseudogene	NM_006173	<p> ttgataggga tagaaacaca ttggctgctt tctatagtta acaagatgct gttacattcc A  ttgcctcact agctctgaag actatactag cgggacaaaag aaagcacctg agatgagctg  agaggagggt aaaggtacac agagatcccc tggatatattg ttctatgtcc tctcaggggc  tttgctacca ctagagaatt atccatatta agaacttgca ttgatattct gggttctgtt  tcatttttta gggctcgaag agcagctca agtcattcac atgtttccat caaatcacaga  cacagatcag ggaagattaa accctactaa tttctcgtcg gatgcctcac aacaaggtgc  cttccaagaa ctaaatggcca aaatatccac ccacaacaca aataagctta gaaaatctct  tcttacaatc ctgacacaat ggaagtttcc ctaaaaccac cagcatctaa tacaaccagc  acaaagaaca acaactcggc atttttttac tttagagctt gtcaacctcc ttctccagct  ttactcctat tatgcatagc ctatactgtg gtcttaattg tgggcctttt tggaaacctc  tctctcatca tcatcatctt taagaagcag agaaaagctc agaatttcac cagcatactg  attgccaatc tctcctctc tgataccttg gtgtgtgtca tgtgcatcca ttttactatc  atctacactc tgatggacca ctggatatatt ggggatacca tgtgcagact cacatcctat  gtgcagagtg tctcaatctc tgtgtccata ttctcacttg tttcactgc tgtcgaaaga  tatcagctaa ttgtgaacc cgtggctgg aagcccagtg tgactcatgc ctactggggc  atcacactga ttgtgctgtt ttcccttctg ctgtctattc ccttcttctt gtctaccac  ctcaactgat agcccttccg caacctctct ctcctcactg accctacac ccaccaggtg  gcctgtgtgg agaactggcc ctccaaaaag gaccggctgc tcttcaccac ctcccttttt  ctgctgcagt attttgttcc tctaggcttc atcctcatct gctacttgaa gattgttatt  tgcctccgca ggagaaatgc aaaggtagat aagaagaagg aaatgaggg ccggtcctaat  gagaaacaaga ggatcaacac aatgttgatt tccatcgtgg tgaccttgg agcctgctgg  ctgccccgaa tatcttcaat gtcacttttg actggtatca tgaggtgctg atgagctgcc  accacgacct ggtatttgta gtttgccact tggttgctat ggtttccaca tgtataaacc  ctctctttta tggctttctc acaaaaatt tccaaaagga cctggtagt cttattcacc  actgctggtg cttcacacct caggaaagat gtgaaaatat tgccatctcc actatgcaca  cagactccaa gaggtcttta agattggctc gtataacaac aggtatatga aaattgataa  tgctgaagct ctctctgaat gggagctgga caggtaatgg tgggaatagg gcaagatgca  gaaagaagaa accagaacca aaaatagcaa cttataccc acttttctt taggctaaga  ctgcctgtct catatgtcta tccaacacac cctccaacat acacgaacac acataccacc  ccttttctct taagaaaata actctaataa ttcaaacacac ctgcccgcca tcatttgtgg </p>	Homo sapiens

376	8896	Neuropeptide Y Receptor Type 6 Pseudogene	NP_006164.1	caagaatga gaatgagaaa gcagagagag aggcaaacag cagtgatggc tggggaacaa tggtcacaga tacttttatt caatggaata tctacaaaag ttagatgacct agtaaaaaa ctgctatacc tccttagcac tgagaat mevslnhpas nttstknns affyfesccp pspallllci aytvvlivgl fgnsliliii P fkqkrkaqnf tsilianlsl sdtlvcvmci hftiiytldm hwifgdmcr ltsyvsqsvsi svsifslvft averyqlivn prgwkpsvth aywgittliwl fslilsipff lsyhltdepf rnlslptdly thqvacvenw pskkdrllft tsllfllyfv plgfillicyl kiviclrrrn akvdkkkne grlnenkrin tmlislvvtf gacwlpriss mssltgimrc Homo sapiens
377	9421	Neuropeptide Y Receptor Type 1	nm_000909	cattcccacc ctctcttctt taataagcag gagcgaataa gacaattcc aaagaggatt A gttcagttca agggaatgaa gaattcagaa taattttggt aaatggattc caatatcggt aataagaata agctgaacag ttgacctgct ttgaagaac atactgtcca ttgtctataa ataatctata acaacaaac caatcaaat gaattcaaca ttattttccc aggttgaaaa tcattcagtc cactctaatt tctcagagaa gaatgcccg ctctgggctt ttgaaaaatga tgattgtcat ctgcccttgg ccattgatatt taccttagct ctgctttatg gagctgtgat cattcttgggt gtctctggaa acctggcctt gatcataatc atcttgaaac aaaaggagat gagaaatgtt accaacatcc tgatttgtaa cctttccttc tcagacttgc ttgttgccat catgtgtctc ccttttacct ttgtctacac attaatggac cactgggtct ttggtgaggg gatgtgtaag ttgaatcctt ttgtgcaatg tggttcaatc actgtgtcca tttctctct ggttctcatt gctgtggaac gacatcagct gataatcaac cctcgaggggt ggagaccaaa taatagacat gcttatgtag gtattgctgt gatttgggtc ctgtctgtgg ctctctctt gcctttcctg atctaccaag taatgactga tgagccgttc caaatgtaa cacttgatgc gtacaaagac aaatcagtg gtatttgatca atttccatcg gactctcata ggtgtgtcta taccactctc ctcttgggtc tgcagtattt tgggtccactt tgttttatat ttatttgcta cttcaagata tatatacgcc taaaaaggag aaacaacatg atggacaaga tgagagacaa taagtacagg tccagtgaat ccaaaagaat caatatcatg ctgctctcca ttgtggtagc atttgcagtc tgcgtggctcc ctcttaccat ctttaacact gtgtttgatt ggaatcatca gatcatttgt acctgcaacc acaatctgtt attcctgctc tggccactca cagcaatgat atccacttgt gtcaacccca tattttatgg gtctctgaac aaaaacttcc agagagactt gcagttcttc ttcaactttt gtgatttccg gtctcggtat gatgattatg aaacaatagc catgtccacg atgcacacag atgtttccaa aacttctttg aagcaagcaa gccagtcgc atttaaaaa atcaacaaca atgatgataa tgaaaaactc tgaaactact tatagcctat ggtcccggt gatctctgtt taaaaacaag cacaacctgc acatactttt gattacctgt tctcccaagg aatgggggtt aaatcatttg aaatgacta agattttctt gtcttgcttt ttactgcttt tgtgtagtt gtcataatta catttggaac aaaagggtg gcttttgggg tcttctggaa atagttttga ccagacatct ttgaagtgtc ttttgaat ttatgcatat aatataaaga cttttatct gtactattg gaatgaaatt tctttaaagt attacgatgc gctgacttca gaagtacctg ccattccaata cggtcattag attgggtcat cttagattaga ttagattaga ttagattgtc aacagattgg gccatcctta ctttatgata ggcatcattt tagtgtgtta caatagtaac agtatgcaa agcagcattc aggagccgaa agatagtctt gaagtcatc agaagtgggt tgaggtttct gtttttgggt ggttttgggt tgttttttt tttttcacc ttaaggaggg ctttcattc ctcccagctt attgtcactt aaatcaaat

378	9421	Neuropeptide NP_000900.1 Y Receptor Type 1	<p> tataaaatga ataaaaagac atactttctca gctgcaataa ttatggagaa ttgggcacccc  acaggaatga agagagaaaag cagctcccca acttcaaaac cattttggta cctgacaaaca  agagcatttt agagtaatta atttaataaa gtaaatagat attgctgcaa atagctaaat  tatatttatt tgaattgatg gtaagagat tttccatttt tttacagac tttcagtggt  ttgtcaagct tctggtctaa tatgtactcg aaagactttc cgctacaat ttgtagaaac  acaaatctcg tttccatac agcagtgcct atatagtac gattttaac ttcaatgtc  catctttcaa aggaagtaac accaaggtac aatgttaaag gaatattcac ttacctagc  agggaaaaat acacaaaaac tgcagatact tcataatagcc catttaact tgtataaact  gtgtgacttg tggcgtctta taaataatgc actgtaaaga ttactgaata gtgtgtcat  gttaatgtgc ctaatttcat gtatcttgta atcatgtatg agcctcagaa tcatttggag  aaactatatt ttaaagaaca agacatact caatgtatta tacagataaa gtattacatg  tgtttgattt taaaaggcgc gacattttat taaaatcaat attgtttttg ctttttctga  ggagtccttt tcaagtttcat tttttctcat cccatgactt cctccgatg gt  LIIIIILKQKE MRNVTNIIIV NLSFSDLLVA IMCLPFTFVY TMDHWVGE AMCKLNPFVQ  CVSITVSIFS LVLIIVERHQ LIINPRGWRP NNRHAYVGIA VIWLVAVASS LPFLIYQVMT  DEPFQNVITLD AYKDKYVCFD QFPSDSHRLS YTTLLLVLOQ FGPLCFIFIC YFKIYIRLKR  RNNMMDKMRD NKYRSSETRK INIMLLSIVV AFVWCWLPIT IFNTVFDWNH QIIATCNHNL  LFLLLCHLTAM ISTCVNPIFY GFINKNFQRD LQFFNFECDF RSRDDDYETI AMSTMHTDVS  KTSLLKQASPV AFKINNND NEKI  agccgagcga gcccgaggat gggaggggc cgcagctcc gtctcgtcaa ggccttctc A  cttctggggc tgaaccccggt cctcgctcc ctcaggacc agcactgcga gagcctgtcc  ctggccagca acatctcaga caatggctac cgggagtgc tggccaatgg cagctgggccc  gcccgctga attactccga gtgccaggag atcctcaatg aggagaaaaa aagcaagggtg  cactaccatg tgcagtcac catcaactac ctgggccact gtatctccct ggtggccctc  ctggtggcct ttgtcctctt tctgcgctc agagcatcc ggtgcctgcg aaacatcatc  cactggaacc tcatctccgc cttcatctg cgcacgcga cctggttctgt ggtccagcta  accatgagcc ccgagggtcca ccagagcaac gtgggctggt gcaggttgggt gacagccgcc  tacaactact tccatgtgac caactctctt tggatgttcg gcgagggtcg ctacctgcac  acagccatcg tgctcaccta ctcactgac cggctgcga aatggatgtt catctgcatt  ggctggggtg tgcccttccc catcattgtg gcctgggcca ttgggaagct gtactacgac  aatgagaagt gctggttttg caaaggcct ggggtgtaca ccgactacat ctaccagggc  cccatgatcc tggctcctgt gatcaatttc atcttcttt tcaacatcgt ccgcatectc  atgaccaagc tccgggcac caccagctct gagaccattc agtacaggaa ggctgtgaaa  gccactctgg tgctgctgcc cctcctgggc atcacctaca tgctgttctt cgtcaatccc  ggggaggatg aggtctcccc ggtcgtcttc atctacttca actccttctt ggaatccttc  caggccttct ttgtgtctgt gttctactgt ttcctcaata gtgaggtccg ttctgccatc  cggaagaggt ggcaccgggt gcaggacaag cactcgatcc gtgcccagat ggcctgtgcc  atgtccatcc ccacctcccc aaccctgtgc agctttcaca gcatcaagca gtccacagca  gtctga </p>	Homo sapiens
379	9834	Corticotropin releasing factor Receptor 1	<p> agccgagcga gcccgaggat gggaggggc cgcagctcc gtctcgtcaa ggccttctc A  cttctggggc tgaaccccggt cctcgctcc ctcaggacc agcactgcga gagcctgtcc  ctggccagca acatctcaga caatggctac cgggagtgc tggccaatgg cagctgggccc  gcccgctga attactccga gtgccaggag atcctcaatg aggagaaaaa aagcaagggtg  cactaccatg tgcagtcac catcaactac ctgggccact gtatctccct ggtggccctc  ctggtggcct ttgtcctctt tctgcgctc agagcatcc ggtgcctgcg aaacatcatc  cactggaacc tcatctccgc cttcatctg cgcacgcga cctggttctgt ggtccagcta  accatgagcc ccgagggtcca ccagagcaac gtgggctggt gcaggttgggt gacagccgcc  tacaactact tccatgtgac caactctctt tggatgttcg gcgagggtcg ctacctgcac  acagccatcg tgctcaccta ctcactgac cggctgcga aatggatgtt catctgcatt  ggctggggtg tgcccttccc catcattgtg gcctgggcca ttgggaagct gtactacgac  aatgagaagt gctggttttg caaaggcct ggggtgtaca ccgactacat ctaccagggc  cccatgatcc tggctcctgt gatcaatttc atcttcttt tcaacatcgt ccgcatectc  atgaccaagc tccgggcac caccagctct gagaccattc agtacaggaa ggctgtgaaa  gccactctgg tgctgctgcc cctcctgggc atcacctaca tgctgttctt cgtcaatccc  ggggaggatg aggtctcccc ggtcgtcttc atctacttca actccttctt ggaatccttc  caggccttct ttgtgtctgt gttctactgt ttcctcaata gtgaggtccg ttctgccatc  cggaagaggt ggcaccgggt gcaggacaag cactcgatcc gtgcccagat ggcctgtgcc  atgtccatcc ccacctcccc aaccctgtgc agctttcaca gcatcaagca gtccacagca  gtctga </p>	Homo sapiens

380	9834	Corticotropin releasing factor Receptor 1	NP_004373.1	MGHPQLRLV ECQEILNEEK AFILRNATWF YSTDLRLKWM LINFIFLNI RVFIYFNSF PTRVSFHSIK QSTAV	KALLLLGLNP KSKVHYHVAV VVLQTMSPV FICIGWVVF VRILMTKLRA LESFQGFVS QSTAV	VSASLDQHC IINYLGHCIS HQSNGWCR PIIWAIAIGK STTSETIQYR VFYCFINSEV RSAIRKRWHR	ESLSLASNIS LVALLVAFVL VTAAYNYFHV LYYDNEKWF KAVKATLVL PLIGITYMLF WQDKHSIRAR	DNGYRECLAN FLRLRSIRCL TNFFWMFEGEG GRKPGVYTDY PLIGITYMLF FVNPGEDEVS VARAMSIPTS	GSWAARVNYS RNIIHWNLLIS CYLHTAIVLT IYQGPMLVL FVNPGEDEVS VARAMSIPTS	Homo sapiens
381	10457	Frizzled-2	NM_001466	cgagtaaagt gaagcgcaagt gcggcgggcca ctgccccgcg ggcttctgcc atgccaaacc tatccgctgg gcacccgtgt gcgcgccagg cgctgcgagc gaggacggag gggggcaccc cacccttcc ggcgagcgtg tcacaggagg gcttccacct gagcggccta ggcttcgtgc ttcagcatgg ggcatgaagt tgggcccgtgc ctgctgagcg ctagcgccgc tcgctcttcc cggctcatgg atcgcttgct cagcactgca gacttcacgg ttctggatct aacagccgac cttctcctccg acgatcgaaa ccc	ttgcaaaag ctcggggttg gcatgcggcc cggggccggc agcccatctc ttctgggcca tgaaggtgca gaacogtgc gctgcgaagc acttcccgcg ctcccgcgct cgggtggccc actgcccgcg attgtgctgc agacgcgttt tcttactgt tcatttttct tcacaggagc agggcaccaa ccagctccat ggggccacga cggtgtgctt tctgtgta gcatccgcac tgcgcatcgg acttctacga agagcctggc tctacatgat ggtcggggcaa acgggtgagac ccgggggtgg ccatttact ccc	gcgcgggagg ggggcggggg ccgcagcgcc ccagttccac catcccgctg cacgaaccag gtgctcgccc ggaacaggcc cctcatgaac ccacggcgcc actcaacacc ggcgcgggcc cgctctcaag gcctgcgaa cgcgcgctc caccacgtac gtcgggctgc cgtggtgtgc gaaggagggc ctggtgggtc ggccatcgag gacctcacc cgtaggcctc cctgttcatc catcatgaag cgtcttctcc gcaggccttc gcaggccttc catcccgctc caaatacctc gacgctgcac caccgtgtga ggccccctaca tttaggttgc agaactctct	agcgaggagg gccaaggagc tgctgtgcc gaactgcgct atcccgccgt aagttcggtt gagcagatct gcgtcgggcca gcgcgcgcgc ggcgactgca ggcgctacgc gtgccatcct cctgcgcgcg tggtatcctca ttggtagaca tacaccatgg aacgagcgct tgccgagga tcttcatgat tcactgtgc gccaactctc tggtggcca aacagcctgg ggcacgtcct ggcacgtcct cacgacggca gtgctctaca cgcgagcact ccggcgccact tcgtggggcat tcgtgggga agttctacac tcgcctcacc caggccggaa cggcgcgcg tttatTTTT taataaaaa gccaacacc	cgggcggggaa cggtggggg tgctgtgcc gcatctccat ccgggaccac tcgctacaa gcctagaggt tcttctgtg ctccatgtac gcgtctctat ctgtgagcgc ttcagtgggc cgagcgccgtg gcgtcgggcca gcgcgcgcgc cggtactgca cggtactgca cagctgagga tcctctgctg cctggtcggt cgtgtgctgc tcgagcgctt ccgctaccca tgtagcggtg tcctcgagga cggttaccgc tcttcatgat tcactgtgct cctggcgagcc cctggcgccg cgacggcgac gggcttcgtg gggcttcgtg cggcttcgtg cgaagctggag caccatcgct gtggtgagc catgtcgccc cagtcgggc tcgcctcacc ccgcgcggcg cggcgcgcg gccaacaccc	Homo sapiens	

382	10457	Frizzled-2	NP_001457.1	MRPRALPRL LLPLLLPAA GPAQFHGEKG ISIPDHGFCQ PISIPLCIDI AYNQTIMPNL P LGHNTQEDAG LEVHQFYPLV KVQCSPELRF FLCSMYAPVC TVLEQAIPPC RSICERARQG CEALMNKFGF QWPERLRCEH FPRHGAEQIC VGNHSEDGA PALLTTAPP GLQPGAGGTP GGPGGGGAPP RYATLEHFFH CPRVLKVPSY LSKFLGERD CAAPCEPARP DGSMTFFSQEE TREFARLWILT WSVLCCASTF FTVTTYLVDM QRFYPERPI IFLSGCYTMV SVAYIAGFVL QERVVCNERF SEDGYRTVVQ GTKKEGCTIL FMMLYFFSMA SSIWWVILSL TWFLAAGMKW GHEAIEANSQ YFHAAWAVP AVKTITILAM QDIDGDLISG VCFVGLNSLD PLRGFVLAPL FVYLFIGTSF LLAGFVSLFR IRTIMKHDGT KTEKLERLMV RIGVFSVLYT VPATIVIACY FYEQAFAREHW ERSWVSQCHK SLAIPCPAHY TPRMSPDFTV YMIKYLMTLI VGITSGFWIW SGKTLHSWRK FYTRLNRSRH GETTV	Homo sapiens
383	11968	Putative Leukocyte Platelet-Activating Factor Receptor (HUMNPIIY20)	NM_022571	atggccttac tgggcagcca gcactccggc gccccctccg cggccggggc acctggcggg A acttcctcag cggccacggc ggcctgtctc tccttcagca ccgtggcgac cgcggcgctg gggaacctga cgcagcgaag cggaggcggc acagctgccg ctcccggtgg cggcggcctt ggcgggtccg gggcagcgcg ggaggcggg cggcggtga ggcggcgctt agcccgagg gcggcgccgc tgcgtgcga cggagctgca gtggcgggc aggcgctcgt cctcctgctc atcttcctgc tgcctagcct tggcaactgc cgccttcac ctgtcgtgt cctatcgga tctgctcacg cagctccgca cgcgcaccaa cgccttcac cgccttcctg gacctctca ctccgccccg gggttcggcg gcgtgctct gctgccccg cgccttcctg gacctctca ctccgccccg gggttcggcg cctgcgctgc cgcggggggc ctggcgcggc ttctgccggc caagcgcgtt ctccagctcg tgcttcggca tgcgtgacgc tcagcgtggc gctcatctcg ttggaccgtt actgcgctat cgtcgccgc cgcggggagaa gatcgggcgc cgcgcgcgc tgcagctgct ggcgggcgcc tggtgacgc cctgggctt ctcttgccc tgaggagctgc tggggcgcc cccggaaactc gcggcgggc agagctcca cggctgcctc taccggacct ccccgagacc cgcgcagctg ggcgggccct tcagcgtggg gctggtggtg gctgctacc tgcctgacct cctgctcacc tgcttcgccc actaccacat ctgcaagacg gtgcgctgt cggacgtgcg cgtgcggcg gtgaacacct acgcgcgcgt gctgcgttct tcagcgaggt gcgcacggc accaccgtcc tcacatga	Homo sapiens
384	11968	Putative Leukocyte Platelet-Activating Factor Receptor (HUMNPIIY20)	NP_072093.1	MALLGSQHS APSAAGPPGG TSSAATAAVL SFSTVATAAL GNLSASGGG TAAAPGGGL P GGSGAAREAG AAVRRPLGPE AAPLLSHGAA VAAQALVLLL IFLSSLGNC AVMGVIVKHR QLRTVTNAFI LSLSLDLLT ALLCLPAAFL DLFTPPGSA PALPAGPWRG FCRPSRFFSS CFGIVYAQRG AHLVGPLLRY RRPPEKIGR RRALQLLAGA WLTALGFSLP WELLGAPREL AAGQSFHGCL YRTSPDPAQL GGPFVGLVW ACYLLPFLLI CFCHYHICKT VRLSDVRVRP VNTYARVLR SARCARPPPS SS	Homo sapiens
385	14198	Interleukin-8 Receptor B	nm_001557	cattcagaga cagaaggtgg atagacaaat ctccaccttc agactggtag gctcctccag A aagccatcag acaggaagat gtgaaaaatcc ccagcactca tcccagaatc actaagtggc acctgtcctg ggccaaagtc ccagacaga cctcattgtt cctctgtggg aatacctccc caggagggca tcctggattt ccccttgca acccaggtca gaagtctcat cgtcaaggtt gtttcatctt ttttttcctg tctaacagct ctgactacca cccaaccttg aggcacagt aagacatcgg tggccactcc aataacagca ggtcacagct gctcttctgg aggtgccta caggtgaaaa gcccgcgac ccagtcagga ttttaagtta cctcaaaaat ggaagatttt	Homo sapiens

aacatggaga gtgacagctt tgaagatttc tggaaagggtg aagatcttag taattacagt  
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aggccttctt ttgttgctc ttcttcaggg cacacttcca ctactctta agcctcctg  
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attttatc aatttaaaaa aaacctgag ccccaaaagg tattttaac accaaggctg  
attaaccaa ggctagaacc acctgcctat atttttgtt aaatgatttc atcaatc  
tttttttaa taaccattt ttacttgggt gtttat

386	14198	Interleukin-8 Receptor B	NP_001548.1	MEDFNMSDS	FEDEFWKGEDL	SNYSYSSTLP	PFLDDAAPCE	PESLEINKYF	VWIIYALVFL	P	Homo sapiens	
				LSLLGNLSLV	LVILYSRVGR	SVTDVYLLNL	ALADLLFALT	LPIWAASKVN	GWIFGTFLCK			
				VVSLKEVNF	YSGILLACI	SVDRYLAIVH	ATRTLTKRY	LVKFCLSIW	GLSLLALPV			
				LLFRRTVYSS	NVSPACYEDM	GNNTANWRML	LRILPQSEGF	IVPLIMLFC	YGFTLRTLFK			
				AHMGQKHRAM	RVIFAVVLIF	LLCWLPLYNLV	LLADTLMRTO	VIQETCERN	HIDRALDATE			
				ILGILHSLCN	PLIYAFIGQK	FRHGLLKILA	IHGLISKDSL	PKDSRPSFVG	SSSGHTSTIL			
387	14641	Calcitonin Receptor	NM_001742		cagaaattcca	ggacaaagag	atcttcaaaa	atcaaaaaatg	aggttccat	ttacaagccg	A	Homo sapiens
				gtgcttgcca	ctgtttcttc	ttctaaatca	cccaaccca	attcttctg	cttttcaaa			
				tcaaacctat	ccaacaatag	agcccaagcc	atttctttac	gtcgtaggac	gaaagaagat			
				gatggatgca	cagtacaaat	gctatgaccg	aatgcagcag	ttaccgcag	accaaggaga			
				aggtccatat	tgcaatcgca	cctgggatgg	atggctgtgc	tgggatgaca	caccggctgg			
				agtattgtcc	tatcagttct	gccagatta	ttttccggat	tttgatccat	cagaaaaggt			
				tacaaaatc	tgtgatgaaa	aaggtgtttg	gtttaaaca	cctgaaaaa	atcgaacctg			
				gtccaactat	actatgtgca	atgctttcac	tcctgagaaa	ctgaagaatg	catatgttct			
				gtactatttg	gctattgtgg	gtcattcttt	gtcaattttc	accctagtga	tttccctggg			
				gattttcgtg	tttttcagga	gccttggctg	ccaaagggtg	accctgcaca	agaacatgtt			
				tcttacttac	attctgaatt	ctatgattat	catcatccac	ctggttgaag	tagtacccaa			
				tgagagctc	gtgcgaagg	accggtgag	ctgcaagatt	ttgcattttt	tcaccagta			
				catgatggcc	tgaactatt	tctggatgct	ctgtgaagg	atctatcttc	atacactcat			
				tgctgtggct	gtgtttactg	agaagcaacg	cttgcggtgg	tattatctct	tgggctgggg			
				gttcccgctg	gtgccaaaca	ctatccatgc	tattacagag	gccgtgtact	tcaatgacaa			
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				acttgtggtc	aatttcttct	ttttgctcaa	catgttccgg	gtgcttgtga	ccaaaatgag			
				ggaaacccat	gaggcggaat	cccacatgta	cctgaaggct	gtgaaggcca	ccatgatcct			
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389	16041	C-C Chemokine Receptor 6	NM_004367	<p> MRFTFTSRCL ALFLLNHPT PILPAFSNOT YPTIEPKPFL YVUGRKKQMD AQYKCYDRMQ P  QLPAYQGE GP YCNRTWDGWL CWDDTPAGVL SYQFCPDYFP DFDSEKVTK YCDEKGVWFK  HPENNRWTSN YTMCAFTPE KLKNAYVLY LAIVGHSLSI FTLVISLGIF VFRSLGCQR  VTLHKMFLT YLNSMIII HLVEVNGE LVRRDPVSCK ILHFFHQYMM ACNYFWMLCE  GIYLHTLIV AVTEKQRLR WYLLGWGFP LVPTTIHAI RAVYENDNCW LSVETHLLYI  IHGPVMAALV VNFELNLIV RVLVTMRET HEAESHYLK AVKATMILVP LLGIQFVFP  WRPSNKMGLK IYDVMHSLI HFQGFVATI YFCNNEVQT TVKRQWAQFK IQWNQRWGRR  PSNRSARAAA AAAEAGDPI YICHQELRNE PANNQGEESA EIIPLNIEQ ESSA  caaacgttcc caaatcttcc cagtcggctt gcagagactc ctgctccca gagataaacc A  agaagctgca tcttattgac agatggtcat cacattggtg agctggagtc atcagattgt  ggggcccgga gtgaggtgca agggagtga tcagagcact gccagagagt cacctctact  ttcctgctac cgtgctgt gagctgaagg ggctgaacca tacactcctt tttctacaac  cagcttgcat ttttctgccc caaatgagc ggggaatcaa tgaatttcag cगतgttttc  gactccagtg aagattattt tgtgtcagtc aatactcat attactcagt tgattctgag  atgttactgt gctccttgca ggaggtcagg cagttctcca ggctatttgt accgattgcc  tactccttga tctgtctct tggcctcctg gggaatattc tgggtgtgat cacctttgct  ttttataaga aggccaggtc tatgacagac gtctatctct tgaacatggc cattgcagac  atcctctttg tcttactct cccattctgg gcagttagtc atgccactgg tgcgtgggtt  ttcagcaatg ccacgtgcaa gttgctaaa ggcattctatg ccatcaactt taactgcggg  atgctgctcc tgacttgcat tagcatggac cggtagatcg ccattgtaca ggcgactaag </p>	Homo sapiens

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Homo  
sapiens

390 16041 C-C Chemokine Receptor 6 NP\_004358.1  
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Homo  
sapiens

391 16599 Smoothened NM\_005631 A  
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396 17345 G Protein-  
Coupled  
Receptor D6 NP\_001287.2 Homo sapiens

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RPAGQGRALK IAAALVVAFF VLWFPYNLTL FLHTLLDLQV FGNCVVSQHL DYALQVTESI  
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397 17535 Gaba (b)  
Receptor 1 NM\_001470 Homo sapiens

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Homo  
sapiens

398 17535 Gaba (b) NP\_001461.1 NP\_001461.1 FLRPPGAGGA QTPNATSEGC QIIHPPWEGG IRYRGLTRDQ VKAINFLPVD P

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aaaa

Receptor 1

Homo  
sapiens

399 17666 Glucagon-Like Receptor 1 NM\_002062 NM\_002062 gaattccggg ttgtgcatc cactctggaa ccgctcgtgt gtggcctgtc ggaatgacat A

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[illegible]

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				<p>           SDERRLPESA VGNLVCGGLS LLANAWGILS VGAKQKWKPK LEFLLLCTLAA THMLNVAVPI P            ATYSVVQLRR QRPDFEWNEL LCKVFVSTFY TLTLATCFVS TSLSYHRMMW VCWPVNYRLS            NAKKQAVHTV MGIWMVSFIL SALPAVGWHD TSERFYTHGC RFIVAEIGLG FGVCFLLLVG         </p>	

405	19501	Ls19072	G Protein- Coupled Receptor KIAA0758	AB018301	GSVAMGVICT AIALFQTLAV QVGRQADRRRA FTVPTIVVED AQGRRSSID GSEPAKTSIQ TTGLVTIVF IYDCLMGFPV LVVSFSSLRA DASAPWALC VLWCSVAQAL LLPVFLWACD RYRADLKAVR EKMALMAND EESDDG	gtgcaagaag aaaaatagatg ttatgccccat ccaaatttttg gcaaatgaag aaatgaaggt A gatgtgcgac acaaatcctg tatctttgaa ctgctgcaat cagggtaatg ttaattggag caaagtagaa tggaagcagg aaggaataat aaatatcca ggaacccctg agacagacat agattctagc tgcagcagat acaccctcaa ggctgatgga acccagtgc caagcgggtc gtctggaaca acagtcatct acacttgta gttcatcagt gcctatggag ccagagggcag tgcaaacata aaagtacat tcatctctgt ggccaatcta acaataacc cggaccctaat ttctgtttct gagggacaaa acttttctat aaaaatgcac agtgatgta gtaactatga tgagggttat tggaacactt ctgctggaat taaaatatac caaagatttt ataccacgag gaggtatctt gatggagcag aatcagtact gacagtcaag acctcgacca gggagtggaa tggaacctat cactgcata ttagatataa gaattcatac agtatggca ccaagacgt cattgttcac ccgtgcctc taaagctgaa catcatggtt gatcctttg agctactgt ttcatgcaat ggttcccatc acatcaagt ctgcatagag gaggatggag actacaaagt tactttocat atgggttctt catcccttcc tgctgcaaaa gaagttaaca aaaaacaagt gtgtacaaa cacaatttca atgcaagctc agtttcttgg tgttcaaaaa ctgttgatgt gtgtgtcac ttaccaaag ctgctaataa ttcaagtttg agcccatcta tgaagctgaa tctgttctt ggggaaaaa tcacatgcca ggatcccgta ataggtgtcg gagagccggg gaaagtcac cagaagctat gccgttctc aaagcttccc agcagccctg agagtcccat tgccgggacc atcacctaca aatgtgtagg ctcccagtg gaggagaaga gaaatgactg catctctgcc ccaataaaca gtctgctcca gatggctaa gctttgatca agagccctc tcaggatgag atgtcccta catacctgaa ggatctttct attagcatag acaagcggga acatgaaatc agctcttctc ctgggagtct gggagccatt ataacatcc ttgatctgct ctcaacagtt ccaacccaag taaattcaga aatgatgag cacgtgctct ctacggttaa tgtcatcctt ggcaagcccg tcttgaacac ctggaaggtt ttacaacagc aatggacca tcagagttca cagctactac attcagtga aagattttcc caagcattac agtcaggaga tagccctctt ttgtccttct ccaaaactaa tgtgcagatg agcagcacgg taatcaagtc cagccacca gaaacctatc aacagaggtt tgttttcca tactttgacc tctggggcaa tgtgttcatt gacaagagct atctagaaa cttgcagctg gattcgtcta ttgtcaccat ggctttccca actctccaag ccactctgc tcaggatatac caggaaaata acttgcaga gagcttagtg atgacaacca ctgtcagcca caatacagct atgccattca ggatttcaat gacttttaag acaaatagcc cttcaggcgg cgaaacgaag tgtgtcttct ggaacttcag gcttgccaac aacacagggg ggtgggacag cagtgggtgc tatgttgaag aaggtgatgg ggacaatgtc acctgtatct gtgaccacct aacatctc tccatctca tgtccctga ctcccatgat cctagttctc tcttggaat actcctggat attatttctt atgttggggt gggttttctc atcttgagct tggcagcctg tctagtgtg gaagctgtg tttggaaatc ggtgaccaag aatcggactt cttatatgcg ccacacctgc atagtgaata tgcctgcctc cctctgggtc gccaacacct ggttcattgt ggtcgtgccc atccaggaca atcgtacat actctgcaag acagcctgtg tggctgccac cttcttctt cacttctct acctcagcgt cttctcttgg atgctgacac tgggcctcat gctgttctat cgcttggtt tcaattctga	Homo sapiens
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406	19501	G Protein- Coupled Receptor KIAA0758	BAA34478.1	<p> tgaacaaagc aggtccactc agaaagccat tgctctctgt cttgggctatg gctgcccact  tgccatctcg gtcatacgcg tgggagccac ccagccccgg gaagtctata cgaggaagaa  tgtctgttgg ctcaactggg aggacaccaa ggcctgctg gctttgcga tcccagcact  gatcattgtg gtggtgaaca taaccatcac tattgtggtc atcaccaaga tcctgaggcc  ttccattgga gacaagccat gcaagcagga gaagagcagc ctgtttcaga tcagcaagag  cattggggtc ctcacaccac tctggggcct cacttggggt tttgggtctca cactgtgtt  cccaggacc aacctgtgtg tccatatcat attgccatc ctcaatgtct tccagggatt  atccatttta ctctttggat gcctctggga tctgaaggtc caggaagctt tgctgaataa  gttttcattg tcgagatggt cttcacagca ctcaaatgca acatccctgg gttcatccac  acctgtgttt tctatgagtt ctccaatc atcagagattt acaaatgtgt ttggtaaaac  aggaacgtat aatgtttcca cccagaagc aaccagctca tccctggaaa actcatccag  tgcttcttcg ttgctcaact aagaacagga taatccaacc tacgtgacct cccggggaca  gtggctgtgc ttttaaaaaa agatgcttgc aaagcaatgg ggaacgtgtt ctggggggcag  gtttccggga gcagatgcca aaaagacttt ttcatagaga agaggctttc ttttgtaaaag  acagaataaa aataattgtt atgtttctgt ttgttccctc cccctccccc ttgtgtgata  ccacatgtgt atagtattta agtgaacctc aagccctcaa ggcctcaact ctctgtctat  attgtaatat agaatttcga agagacattt tcacttttta cacattgggc acaagataa  gctttgatta aagtagtaag taaaaggcta cctaggaaat acttcagtga attctaagaa  ggaaggaaag aaggaaagaa ggaagaagg gagggaaaca gggagaaaagg gaaaaaagaa  aaaaagagaa agatgaaaat aggaacaaat aaagacaaac aacattaaagg gccatattgt  aagatttcca tgttaatgat ctaataataat cactcagtc aacattgaga atttttttt  taatggctca aaaaaggaaa ctgaaagcaa gtcattggga atgaataact tgggcagtat  cttccctgat tcttcttagc taagaggagg aaaaaaggc tgaaaaaata gggaggaat  tcttcatca gaacgacttc aagtggata caatatttat aagaaatgaa tggaaaggaaa  tatgatctc ctgagactaa ctttgtatgt taagggttga actaagtga tgtatctgca  gaggaagtat tataagata tgtcattaga tccaagtgtc gattaaattt ttatagtta  tcagaaaaagc cttatatatt agtttgttcc acattttgaa agcaaaaaat atatatgga  tatacccttc aattgcaaaa ttgatattgt tgcactgaag acagacctcg tcatatattt  aatggcttca agcaggtact tctctgtgca ttatagaata gattttaata atcttatagc  attgtatatt attattgctg ttgtcactgt tattattatt ttgtgatactg gcccttgggtg  tgttgcatag ctccctatgt attctctgtt tccatcttta agttcccaga ccaatataca  ttaagagttt tgcattgtct aaattgtgtt tattccaacc acgtggaaaag ctccctggaaa  gaaattttac attcgggtgt tctgtgctcc taatgacact tgacctgtgt gaacaaatgg  cagagccttt cccaaggatt tgattgtttg tgaattatct gcatgtgtgc ttttttttg  tgtgtatttc attaaaaaat ataaatattt atg </p>	<p> CKKIDVMP1 QILANEMKV MCDNNPVSLN CCSQGNVWS KVEWKQEGKI NIPGTPETDI P  DSSCSRYTLK ADGTQCPGSGS SGTTVIYTCF FISAYGARG ANIKVTFISV ANLTITPDPI  SVSEGNFISI KCISDVSNYD EYVWNTSAGI KIYQRFYTR RYLDGAESVL TVKTSTREWN  GTYHCIFRYK NSYSIATKDV IVHPLPLKLN IMVDPLEATV SCSSGSHIKC CIEEDGDYKV  TFHMGSSSLP AAKEVNNKKQV CYKHNFNASS VSWCSKTVDV CCHFTNAANN SWSPSPMKLN  LVPGENITCQ DPVIGVGEPG KVIQKLCRFS NVPSSPESPI GGITYKCVG SQWEEKRND </p>	Homo sapiens
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407	21632	G Protein-Coupled Receptor Ls21632	AB040964	ISAPINSLQ MAKALIKSPS QDEMLPTYLK DLSISIDKAE HEISSSPGSL GAINILDLL STVPTQVNSE NMTHVLSTVN VILGKPLVNT WKVLQQWNTN QSSQLLHSE RFSQALQSGD SPPLSFSQTN VOMSSTVIKS SHPETYQORF VEPYFDLWGN WIDKSYLEN LQSDSSIVTM AFPTLQAILA QDIQENNAE SLVMTTVSH NTPMPFRISM TFKNNSPSGG ETCKCVFWRER LANNTGGWDS SGCYVEEGDG DNVTICIDHL TSFSILMSPD SPDPSSLLGI LLDIISYGVV GFSILSLAAC LVVEAVVWKS VTKNRTSYMR HTCIVNIAAS LLVANTWFIV VAAIQDNRYI LCKTACVAAT FFHFFYLSV FFWMLTLGLM LFYRLVFLH ETSRSTQKAI AFCLGYGCPL AISVITLGAT QPREVYTRKN VCWLNWEDTK ALLAFAPAL IIVVNITIT IIVITKILRP SIGDKPCKQE KSLFQISKS IGVLTPLLGL TWGFGLTTFV PGTNLVFIH I FAILNVFQGL FILLFGCLWD LKVOEALLNK FSLSRWSSQH SKSTSLSGST PVFSMSSPIS RRFNNLFGKT GTYNVSTPEA TSSSLENSSS ASSLLN	Homo sapiens
				accacctcat ccgctcccta cgccaagtgg tgttccaggg ggatcggtg ccctccagt A gctctgccag ctacctgggc aacgacaccc gcatccgctg gtaccacaa cgaagccctg tggagggtga tgagcaggcg ggcatactcc tggccgagag cctcatccac gactgcacct tcatcaccag tgagctgacg ctgtctaca tggcgtgtg ggccctcaggc gactgggagt gcaccgtgtc catggcccaa ggcaacgcca gcaagaaggt ggagatcgtg gtctgggaga cctctgctc ctactgccc gccgagcgtg ttgccacaa ccgcgggac ttcaggtggc cccgaactct ggctggcatc acagcctacc agtctgctt gcagtatccc ttcacctcag tgccctggg cgggggtgcc cggggcacc ggcctccc gacgtgtgac cgtgcgggc gctgggagcc aggggactac tcccactgtc tctacacaa cgacatcacc aggtgtgtgt acacctctgt gctgatgcc atcaatgctt ccaatgcgtt gacctggct caccagctgc gcgtgtacac agcagagcc gctagctttt cagacatgat ggatgtagt tatgtgctc agatgatcca gaaattttt ggttatgtg accagatcaa agactggta gaggatgag tggacatggc cagcaacctg atgctggtg accagacact gctgtggtg gccagcgcg aggacaaggc ctgcagccgc atcgtgggtg ccctggagcg cattgggggg gccgccctca gccccatgc ccagcacatc tcaagtgaatg cgaggaacgt ggcatggag gctacctca tcaagccgca cagctacgtg ggctgacct gcagagcctt ccagagaggg gaggaggggg tgccggggcac acggccagga agcctggcc agaaccccc acctgagccc gagccccag ctgaccagca gctccgcttc cgtgcacca ccgggagggc caatgtttct ctgtcgtct tccacatcaa gaacagcgtg gccctggctt ccatccagct gccccgagt ctattctcat cccttccggc tgccctggct cccccggctg cccagactg caccctgcaa ctgctcgtct tccgaaatgg ccgctcttc cacagccaca gcaacacct cccgcttga gctcgtggcg ctggcaagag gcgtggcgtg gccaccccc gctatcttc aggaaccagt ggctgtggcg tgggaaacct gacagagcca gtggcgttt cgtgcggca ctgggctgag ggagccgaac ctgtggccgc ttgtggagc caggaggggc ccgggggaggg tgggggctgg acctcgagg gctgccagt ccgctccagc cagcccaatg tcagcgccct gcactgccag cacttgggca atgtggccgt gctcatggag ctgagcgctt tcccaggga ggtggggggc gccggggcag ggctgcacc cgtgtatcc cctgtcagg cctgtgctg gctcgtcctc ttcgccacca tcatcaccta cctctcaac cacagctcca tccgtgtgtc ccggaaggc tggcaatgc tgctgaact gtgctccac atagccatga cctctgtgt ctttgcggg ggcatacac tcaccaacta ccagatgggtc tgccaggcgg tgggcatcac cctgcactac tctcctat	

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408	21632	G Protein- Coupled Receptor Ls21632	BAA96055.1	<p>HLIPSLRQV FQDRLPFC SASYLGNDR IRWYHNRAPV EGDEQAGILL AESLIHDCFT P</p> <p>ITSELTLSHI GVMASGEWEC TVSMAQGNAS KKVEIVVLET SASYCPAERV ANNRGDFRWP</p> <p>RTLAGITAYQ SCLQYPTTSV PLGGGAPGTR ASRRCDRAGR WEPGDYSHCL YTNDITRVLV</p> <p>TFVIMPINAS NALTLAHQLR VYTAEAAFS DMMDVYVVAQ MIQKFLGVVD QIKELVEVMV</p> <p>DWASNLMLVD EHLWLQAQRE DKACSRIVGA LERLGGAAALS PHAQHISVNA RNVALEAYLI</p> <p>KPHSYVGLTC TAFQRREGV PGTRPGSPGQ NPPEPEPPA DQQLRFRCTT GRPNVSLSSF</p> <p>HIKNSVALAS IQLPPSLFSS LPAALAPPVP PDCTIQLLVF RNRFLFHSHS NTSRPGAAGP</p> <p>GKRRGVATPV IFAGTSGCGV GNLTPEPVAVS LRHWAEGAEP VAAWWSQEGP GEAGGWTSEG</p> <p>COLRSSQPNV SALHCQHNLGN VAVLMELSAF PREVGAGAG LHPVVYPCTA LLLLCLFATI</p> <p>ITYILNHSSI RVSRKGWHL LNLCFHIAMT SAVFAGGITL TNYQMVCCQAV GITLHYSSLS</p> <p>TLWMGVKAR VLHKELTWRA PPQEGDPAL PTPSPMLRST LWRPSSLGAF YIPVALILLI</p> <p>TWIYFLCAGL RLRGPLAQNP KAGNSRASLE AGEELRGSTR LVSGPPLLSG SGLLATGSA</p> <p>RVGTPGPPED GDSLYSPGVQ LGALVTTHFL YLAMWACGAL AVSQRWLPV VCSCLYGVAA</p> <p>SALGLFVFTH HCARRRDVRA SWRACCPAS PAAPHAPPA LPAAAEEDGSP VFGEPPPSLK</p> <p>SSPSGSSGHP LALGPCKLTN LQLAQSQVCE AGAAAGGEPE PEPAGTRGNL AHRHPNNVHH</p> <p>GRRHKSRAK GHRAGEACGK NRLKALRGA AGALELLSSE SGLHNSPTD SYLGSSRNSP</p> <p>GAGLQLEGEPL MTPSEGSMT SAAPLSEAGR AGQRRSASRD SLKGGGALEK ESHRRSYPLN</p> <p>AASLNGAPKG GKYDDVTIMG AEVASGGCMK TGLWKSETTV</p>	Homo sapiens
409	22315	G Protein- Coupled Receptor GPR92/GPR93	NM_020400	<p>atgttagcca acagctcctc aaccaacagt tctgttctcc cgtgtcctga ctaccgacct A</p> <p>accaccgcc tgcacttggt ggctacagc ttggtgctgg ctgcccgggt cccctcaac</p> <p>gcgctagccc tctgggtctt cctgcgcgcg ctgcgcgtgc actcgggtgt gagcgtgtac</p> <p>atgtgtaacc tggcggccag cgacctgctc tteacctct cgctgcccgt tctctctcc</p> <p>tactacgcac tgcaccactg gcccttccc gacctctgt gccagacgac gggcgccatc</p> <p>ttccagatga acatgtacgg cagctgcac ttctgatgc tcatcaacgt ggaccgctac</p> <p>gcgcacatcg tgcaccgct gcgactgcgc cactgcggc ggccccgct ggcgcggctg</p> <p>ctctgcctgg gcgtgtggc gctcactctg gtgtttgccg tgccccgcgc ccgctgcac</p> <p>aggccctgc gttgccgcta ccgggacctc gaggtgcgc tatgttcga gagcttcagc</p> <p>gacgagctgt ggaaggcag gctgctgcc ctcgtgctgc tggccgagc gctgggcttc</p> <p>ctgctgcccc tggcggcggt ggttactcg tgggcccag tcttctggac gctggcgcg</p> <p>cccgacgcca cgcagagcca gcggcgcg gacacgctgc gcctctgct ggctaacctc</p> <p>gtcatcttcc tgctgtgctt cgtgccctac aacagacgc tggcggctca cgggctgctg</p> <p>cggagcaagc tgggtggcgc cagcgtgctt gcccgcatc gcgtgcgcgc ggtgctgatg</p>	Homo sapiens



410 22315 G Protein-  
Coupled  
Receptor  
GPR92/GPR93 NP\_065133.1 Homo sapiens

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VIFLLCFVPY NSTLAVYGLL RSKLVAAVSP ARDRVGVLM VMVLLAGANC VLDPLVYFYS  
AEGFRNTLRG LGTPHRATS ATNGTRAALA QSERSAVTTD ATRPDAASQG LLRPSDSHSL  
SSFTQCPQDS AL

411 22925 Latrophilin-3 NM\_015236 Homo sapiens

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TDDKICDSDP	AQMENIRCYL	PDAYKINSQR	CNNRTQCNAV	AGPDVFPDPC	PGTYKYLEVO

413	25359	G Protein- Coupled Receptor GPR34	NM_005330	<p>YECVPYKVEQ KVFLLCPGLLK GVVQSEHLFE SDHQSGAWCK DPLQASDKIY YMPWTPYRTD  TLTEYSSKDD FIAGRPTTTY KLPHRVDTGT FVVYDGALEFF NKERTRNIVK FDLRTRIKSG  EAIIANANYH DTSPYRWGGK SDIDLAVDEN GLWVIYATEQ NNGKIVISQL NPYTLRIEGT  WDTAYDKRSA SNAFMICGIL YVVKSVYEDD DNEATGNKID YIYNTDQSKD SLVDVFPFNS  YQYIAADVYN PRDNLIVWN NYHVWKYSLD FGLDSRSGQ AHGQVSYIS PPIHLDSELE  RPSVKDISTT GPLGMGSTTT STTLRTTTLT PGRSTTPSVS GRNRSTSTP SPAVEVLDDM  TTHLPSASSQ IPALESCSEA VEAREIMWEK TRQQIAKQP CPAGTIGVST YLCLAPDGIW  DPQGPDLNSC SSPWNHITQ KLSGETAAN IARELAEQTR NHLNAGDITY SVRAMDQLVG  LLDVQLRNLIT PGGKDSAARS LNKLOKRERS CRAYVQAMVE TVNNLLQPOA LNAWRDLTTS  DQLRAATMLL HTVESAFVL ADNLLKTDIV RENTDNIKLE VARLSTEGNL EDLKFENMG  HGSTIQLSAN TLKONGRNGE IRVAFVLYNN LGPYLSTENA SMKLGTEALS TNHSVIVNSP  VITAAINKEF SNKVYLADPV VFTVKHIKQS EENFNPCSF WSYSKRMTGT YWSTQGCRLI  TTNKTHTTCS CNHLTNFAVL MAHVEVKHSD AVHDLLEDVI TWVGILLSLV CLLCIFITFC  FFRGLQSDRN TIHKNLCISL FVAELLFLIG INRTDQPIAC AVFAALLHFF FLAFTWMFL  EGVQLYIMLV EVFEHSRR KYFYLVGGM PALIVAVSAA VDYSYGTDK VCWLRLDTYF  IWSFIGPATL IIMLVIFLG IALYKMFHTT AILKPESGCL DNINYEDNRP FIKSWVIGAI  ALLCLLGLTW AFGLMYINES TVIMAYLFTI FNSLQGMFIF IFHCVLQKKV RKEYGKCLRT  HCCSGKSTES SIGSGKTS GS RTPGRYSTGS QSRIRRMWMD TVRKQSESSF ITGDINSSAS  INREPYRETS MGVKLNIAIYQ IGASEQCQGY KCHGYSTTEM</p> <p>atgagaagtc ataccataac aatgacgaca acttcagtc a gcagctggcc ttactcctcc A  cacagaatgc gctttataac caatcatagc gaccaaccgc cacaacctt ctacagcaaca  ccaaatgcta ctactgtcc catggatgaa aaatgtctat ctactgtgtt aaccacatcc  tactctgtta ttttcactgt gggactgggt ggaacataaa tcgcccctcta tgtatttctg  ggtattcacc gtaaaagaaa ttccattcaa atattatctac ttaacgtagc cattgcagac  ctcctactca tcttctgcct ccttttcga ataatgtatc atattaccca aaacaagtgg  acactagggt tgattctgtg caaggtgtg ggaacactgt tttatatgaa catgtacatt  agcattattt tgcttggtt catcagtttg gatcgctata taaaaattaa tcggtctata  cagcaacgga aggaataac aaccaaaaca agtatttatg tctgtgtgat agtatggatg  cttgctcttg gtgattcct aactatgatt attttaaac ttaagaaagg aggcataat  tccacaatgt gttccatta cagagataag cataacgcaa aaggagaagc catttttaac  ttcattcttg tggtaatgtt ctggctaatt ttcttactaa taatcctttc atattataag  atgggaaga atctattgag gatttctaaa aggaggtcaa aatttctaa ttctggtaaa  tatgccacta cagctcgtaa ctcctttatt gtacttatca ttttactat atgttttgtt  ccctatcatg ccttctgatt catctacatt tcttcacagc taaatgtatc atcttgctac  tggaagaaaa ttgttcacaa aaccaatgag atcatgctgg ttctctcatc ttcaatagt  tgcttagatc cagtcagtga tttcctgatg tccagtaaca ttcgaaaaat aatgtgcaa  cttcttttta gacgatttca agtggaacca agtaggagtg aaagcacttc agaatttaa  ccaggatact cctgcatga tacatctgtg gcagtgaata tacagtctag ttctaaaagt  actga</p>	Homo sapiens
414	25359	G Protein- Coupled	NP_005291.1	<p>MRSHITMTT TSVSSWPYSS HRMRFTNHS DQPPQNFSA PNVVTCPMDE KLLSTVLTTS P  YSVIFIVGLV GNIIALYVFL GIHRKRNSIQ IYLLNVAIAD LLLIFCLPFR IMYHINQNKW</p>	Homo sapiens

Receptor GPR34	30698	G Protein- Coupled Receptor Is30698	AX068267	415	<p>           TLGVILCKV GTLFYNNMYI SIILLGFISL DRYIKINRSI QQRKAITTKQ SIYVCCIVMM            LALGGFLTMI ILTLKKGGHN STMCFHYRDK HNAKGAEAFN FILVVMFWLI FLIIILSYIK            IGKNLLRISK RRSKFPNSGK YATTARNSEFI VLIIFTICFV PYHAFRFIYI SSQNLNVSSCY            WKEIVHKTNE IMLVLSSFNS CLDPVMYFLM SSNIRKIMCQ LLFRRFQGEF SRSESTSEFK            PGYSLHDTSV AVKIQSSSKS T         </p>	<p>           gttctcagat cgggttctctg caacaggcag tcagttctca ctgggcccct tggactccca A            ttccaataat ggagaagaca gatcacagcc actgaccagg gacgtggga ggtgccacgt            gatggtgagg catcatgcta gggagctgag ctctgacctt cctgctgggt gattctccac            ctctgggctg ctgagctctac ttctctggat ccgtgaagat cctcatgtat gaaaatgaag            tcccaggcaa ccatgatttg ctgcttagtg ttctttctgt ccacagaatg ttcccactat            agatccaaga ttcaactaaa agctatagt gaagtggcca accacatcct cgacacagca            gccatttcaa actgggcttt cattcccaac aaaaatgcca gctcgatttt gttgcagtica            gtgaatttgt ttgccagaca actccacatc cacaataatt ctgagaacat tgtgaatgaa            ctcttcattc agacaaaagg gtttcacatc aaccataata cctcagagaa agcctcaat            ttctccatga gcatgaacaa taccacagaa gatattcttag gaatgtaca gattccccagg            caagagctaa ggaagctgtg gccaaatgca tcccaagcca ttagcatagc ttccccaaac            ttgggggcta tctgagaga agcccacttg caaaatgtga gtcttccag acaggtaaat            ggtctggtgc tateagtgtt ttaccagaa aggttgcaa aaatcatact cacttcgaa            aagatcaata aaaccgcaa tgccagagcc cagtggttg gctggcactc caagaaaagg            agatgggatg agaaagctg ccaaatgat ttggatatca ggaacgaagt gaaatgccgc            tgtaactaca ccagtgtgt gatgtcttt ttcatctca gtctctcaa atcgatgacc            gacaaagtgc tggactacat cactgcatt gggctcagcg tctcaatcct aagcttggtt            ctttgcctga tcattgaagc cacagtgtg tccgggttg ttgtgacgga gatatacat            atgcgtcacg tgtgcatcgt gaatatagca gtgtcccttc tgactgccaa tgtgtggttt            atcataggct ctacatttaa cattaaggcc caggactaca acatgtgtgt tgcagtga            ttttccagcc actttttcta cctctctctg ttttcttga tgctctcaa agcattgctc            atcatttatg gaatatgtgt cattttccgt aggatgatga agtcccgaat gatggtcatt            ggctttgcca ttggctatgg gtgccattg gtccattg ttaactggga caataccaaa            gagccagaga acggtacat gagacctgag gctgttggc ctgtaaatct gattgtggtt            gcccttttag catttgcat cccggcgctc gtcattgtg gtccaaatc tcaggatgtg            ttggtgtgtg ctgtcaacac tcagaggccc tctattggca gtcccaagtc tcaggatgtg            gtcataatta tgaggatcag caaaaatgtt gccatctcca ctcactgct gggactgacc            tggggttttg gaatagccac tctcatagaa ggcacttctc tgacgttcca tataattttt            gccttgctca atgctttcca gggttttttc atcctgctgt ttggaacctc tatggatcac            aagataagag atgctttgag gatgaggatg tcttcactga aggggaaatc gagggcagct            gagaatgcat cactaggccc aaccaatgga tctaaatgga tgaatcgtca aggatgaaat            gctgccccat ttctcatgga tctcctgaga ccaagagggg agatccagga gaaagaggcc            atggaaagca ggctggagt aggaggaatg gtcattgctc ctgggaagac ttctcttct            tgtcaggagt gactcccaag ctcttggtcg gccgaagaaa aactgaggat aacatttgc            gactgggctt taaggagcat gatttatgga ccccttaacc taccgtgccc ctgcaagagg            ctggcttctt ggtcaatctt gactagatta agagtcaatc tgcaagccat ttatggctc         </p>	<p>           Homo sapiens         </p>
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416	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	<p>ccctggccag ctgggggctg tagggccctg ctggggcttg tgcgtttca ctctgaggg</p> <p>ctgctctgtg gctccatagc tcagtcctcc atcaactctg gtggatectg ggtactttgg</p> <p>acagtgaggg ttcgatccaa ttttaggggt aggggtgggg gtgggagtggt gagtgtgggt</p> <p>tggcaggagg aagaatgagt ctactttgga gacaattaag tcatggtacg ttctctaaag</p> <p>atagggaaag gaagaaagc aagagaactg ttaataatgc tgattatttt agtctatttt</p> <p>agacctgag taaactaatt tagcttctag gatccaaagt tccttatttg tgaacacagga</p> <p>aaaaaaaatt cttgtaggta ttactgtttg tbtgttttag ttactgtcac atgttttgt</p> <p>ttgtgtatat gtgtctttta aaaatactat atataaagaa gattctgggt gttatttttag</p> <p>acataaacga atatatgtac ctttcac</p> <p>MKMKSQATMI CCLVFFISTE CSHYRSKIHL KSYSEVANHI LDTAASINWA FIPKNASSD P</p> <p>LIQSVNLFAR QLIHNSEN IVNELFIQTK GFHINHNTSE KSLNFSMSMN NTEDILGMV</p> <p>QIPRQELRKL WPNASQAISI APTLIGAILR EAHIQNVSLP QVNGLVLSV VLPERLQEI</p> <p>LTFEKINKTR NARAQCVGWH SKRRWDEKA QMMIDIRNE VKRCNNTSV VMSFSILMSS</p> <p>KSMTDKVDY ITCIGLSVSI LSLVLCIIIE ATVSRVVVT EISYMRHVC I UNIAVSLTA</p> <p>NWFIIGSHF NIKAQDYNMC VAVTFESHFF YLSLFFWMLF KALLIIYGIL VIFRRMKSR</p> <p>MMVIGFAIGY GCPLIIAVTT VAITEPENGY MRPEACWLNW DNTKALLAFA IPAFVIVAVN</p> <p>LIVLVAVN TQRPSIGSSK SQDWIIMRI SKNVAILTPL LGLTWGFGIA TLIEGTSLTF</p> <p>HIIFALLNAF QGFFILLFGT IMDHKIRDAL RMRSSLKKG SRAAENASLG PTNGSKLMNR</p> <p>QG</p>	Homo sapiens
417	30875	G Protein-Coupled Receptor GPR87/GPR95	NM_023915	<p>ggcacgaggg ttctggtttc atgctttacc agaaaaacca cttccctgcc gaccttagt A</p> <p>tcaaaagctta ttcttaatta gagacaagaa acctgtttca acttgaagac accgtatgag</p> <p>gtgaatggac agccagcac cacaatgaaa gaaatcaaac caggaataac ctatgctgaa</p> <p>ccacgcctc aatcgctccc aagtgtttcc tgacacgcat ctttgcttac agtgcatcac</p> <p>aactgaagaa tgggggttcaa cttgacgctt gcaaaattac caaataacga gctgcacggc</p> <p>caagagagtc acaattcagg caacaggagc gacgggccag gaaagaacac caccctcac</p> <p>aatgaatttg acacaattgt cttgccggtg ctttatctca ttatatgtgt ggcaagcadc</p> <p>ttgctgaatg gtttagcagt gtggatcttc ttccacatta ggaataaaac cagcttcata</p> <p>ttctatctca aaacacatagt ggttgacagc ctacataatga cgtgcacatt tccatttoga</p> <p>atagtcctat atgcaggatt tggaccttgg tacttcaagt ttattctctg cagatacact</p> <p>tcagttttgt tttatgcaaa catgtatact tccatcgtgt tccctgggct gataagcatt</p> <p>gacgctatc tgaagggtgt caagccattt ggggactctc ggatgtacag cataaccttc</p> <p>acgaaggttt tatctgtttg tgtttgggtg atcatggctg ttttgccttt gccaaacatc</p> <p>atcctgacaa atggtcagcc aacagaggac aatatccatg actgctcaaa acttaaaagt</p> <p>cctttggggg tcaaatggca tacggcagtc acctatgtga acagctgctt gtttgggcc</p> <p>gtgctggtga ttctgctcgg atgttacata gccatatcca ggtacatcca caaatccagc</p> <p>agggcaattca taagtcagtc aagccgaaaag cgaaaaacata accagagcat cagggttgtt</p> <p>gtggctgtgt tttttacctg ctttctacca tatcacttgt gcagaattcc ttttactttt</p> <p>agtcacttag acaggctttt agatgaatct gcacaaaaaa tcctatatata ctgcaaaagaa</p> <p>attacacttt tcttgtctgc gtgtaattgt tgcctggatc caataattta ctttttcag</p> <p>tgtaggtcac tttcaagaag gctgttcaaa aaatcaataa tcagaaccag gagtgaagc</p> <p>atcagatcac tgcaaaagtgt gagaagatcg gaagttcgcga tatattatga ttacactgat</p>	Homo sapiens

418	30875	G Protein- Coupled Receptor GPR87/GPR95	NP_076404.1	gtgtaggcct tttattgttt gttggaatcg atatgtacaa agtgtaaata aatgtttctt ttcattatcc ttaaaaaaaa aa MGFNLTIAKL PNNELHGQES HNSGNRSDGP GKNTTLHNEF DTIVLPVLYL IIFVASILIN P GLAWIFFHI RNKTSFIFYL KNIVVADLIM TLTFPFRIVH DAGFGPWYFK FILCRYTSVL FYANMYTSIV FLGLISIDRY LKVKPFGDS RMYSTITFKV LSVCVWVIMA VLSLPNILT NGOPTEDNIH DCSKLKSP LG VKWHTAVTVV NSCLFVAVLV ILIGCYAIS RYIHKSSRQF ISQSSRRKRH NQSIRVVAV FFTCFLPYHL CRIPFTFSLH DRLLDESAQK ILYYCKEITL FLSACNVCLD PIYFFMCRS FSRRLFKN N IRRSESIRS LQSVRRSEVR IYYDYTDV ggccttatct ttccagtcgt ccagcatgct ctgcccaccc cagccgaggt tgcactgacc A atgagcctca actcctccct cagctgcagg aaggagctga gtaatctcac tgaggaggag ggtggcgaag ggggcgtcat catcaccag ttcatcgcca tcattgtcat caccattttt gtctgcctgg gaaacctggt catctgggtc acctgtaca agaagtccta cctcctcacc ctcagcaaca agttcgtctt cagcctgact ctgtccaaact tctgtctgtc cgtgttggtg ctgccttttg tggtagacag ctcacatcgc aggaatgga tctttggtgt agtgtggtg aacttctctg cctcctcta cctgctgac cctcctgcca gcatgctaac cctcggggtc attgccatcg accgctacta tctgtcctg taccctatgg tgtaccccat gaagatcaca gggaaccggg ctgtgatggc acttgtctac atctggcttc actcgtcat cggctgcctg ccacccctgt ttggttggtc atccgtggag tttagacagt tcaaatggat gtgtgtggt gcttggcacc gggagcctgg ctacacggcc ttctggcaga tctgtgtgc cctcttccc tttctggtca tctgtgtgtg ctatggcttc atcttcccg tggccaggggt caaggcacgc aaggtgact gtggcacagt cgtcatcgtg gaggaggtg ctacagagac cgggaggaag aactccagca cctccacctc ctcttcaggc agcaggagga atgcctttca ggtgtgtggtc tactcggcca accagtgcac agccctcacc accatcctgg tggctcctgg tgccttcag gtcacctggg gccctacat ggttgtcacc gctctgagg cctctgggg gaaaagctcc gtctcccca gctggagac ttggggccaca tggctgtcct ttgccagcgc tgtctgccac ccctgatct atggactctg gaacaaagaca gttcgcaaa gactactggg catgtgcttt ggggaccggt attatcggga accatttgtg caacgacaga ggacttccag gctcttcagc atttccaaaca ggtacacaga cctgggcttg tccccacacc tcaactgcgt catggcaggt ggacagcccc tggggcacag cagcagcacg ggggacactg gcttcagctg cttccaggac tcaggtaacc tgcgtgcttt ataagcctct cacctgtcgc gttttccctg tgttgcgttt cccccgctc gcgtttcccc tgtgcaggct caagagctgg cggaggggga tttccacagg tg	Homo sapiens
419	31568	G Protein- Coupled Receptor RE2	NM_007369	mslnsslsclsr kelsnlteee ggeggviitq fiaiiivitf vclgnlvivw tlykksyllt P lsnkfvfslt lsnfllslvl lpfvvtssir rewifgvwvc nefsallylli ssasmltlgv iaidryyavl ypmvypmkit gnravmalvy iwlhsligcl pplfgwssve fdefkwmcva awhrepgyta fwiwcalfp flvmlvcygf ifrvarvkar kvhcgfvivv eedaqrtgrk nsststsssg srrnafqgw ysanqckali tilvlgafm vtwgpymvvi asealwgkss vpsletwat wlsfasavch pliyglmkt vrkellgmcf gdryyrepfv qrqtsrlfs isnritdlgl sphltalmag gqplghssst gdtgfscsqd sgnlral atggacacct cccgctcgg tgtgtcctg tcttgctgca gctggcgacc A gggggcagct cctccaggct tgggtgtgtg ctgagggggt gcccacaca ctgtcattgc	Homo sapiens
420	31568	G Protein- Coupled Receptor RE2	NP_031395.1	mslnsslsclsr kelsnlteee ggeggviitq fiaiiivitf vclgnlvivw tlykksyllt P lsnkfvfslt lsnfllslvl lpfvvtssir rewifgvwvc nefsallylli ssasmltlgv iaidryyavl ypmvypmkit gnravmalvy iwlhsligcl pplfgwssve fdefkwmcva awhrepgyta fwiwcalfp flvmlvcygf ifrvarvkar kvhcgfvivv eedaqrtgrk nsststsssg srrnafqgw ysanqckali tilvlgafm vtwgpymvvi asealwgkss vpsletwat wlsfasavch pliyglmkt vrkellgmcf gdryyrepfv qrqtsrlfs isnritdlgl sphltalmag gqplghssst gdtgfscsqd sgnlral atggacacct cccgctcgg tgtgtcctg tcttgctgca gctggcgacc A gggggcagct cctccaggct tgggtgtgtg ctgagggggt gcccacaca ctgtcattgc	Homo sapiens
421	36534	G Protein- Coupled	NM_003667	atggacacct cccgctcgg tgtgtcctg tcttgctgca gctggcgacc A gggggcagct cctccaggct tgggtgtgtg ctgagggggt gcccacaca ctgtcattgc	Homo sapiens

Receptor  
GPR49

gagccgacg gcaggatgtt gctcagggtg gactgctccg acctggggct ctcgaggctg  
 ccttccaacc tcagcgtctt cacctcctac ctagacctca gtatgaacaa catcagtcag  
 ctgctcccg atccccgcc cagtcctccg ttctctggag agttacgtct tgcgggaaac  
 gctctgacat acattcccaa gggagcattc actggccttt acagtcttaa agttcttattg  
 ctgcagaata atcagctaag acacgtaccc acagaagctc tgcagaattt gcgaagcctt  
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 gcttttagaa gttatcggc attgcaagcc atgacctggg cctgaacaa aatacacccac  
 ataccagact atgcctttgg aaacctctcc agcttggtag ttctacatct ccataacaat  
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 ccttctctta ttacaataca ttcttatgac aatcccatcc aattgttgg gagatctgct  
 ttccaacatt tacctgaact aagaacactg actctgaatg gtgcctcaca aataactgaa  
 ttctctgatt taactggaac tgcaaacctg gagagtctga ctttaactgg agcacagatc  
 tcatctcttc ctcaaacctg ctgcaatcag ttaoctaatc tccaagtgtc agatctgtct  
 tacaacctat tagaagattt acccagtttt ttagtctgcc aaaagcttca gaaaattgac  
 ctaagacata atgaaatcta cgaatttaaa ttgacacttt tccagcagtt gcttagcctc  
 cgatcgctga atttggcttg gaacaaaatt gctattattc accccaatgc attttccact  
 ttgccatccc taataaagct ggacctatcg tccaacctcc tgtcgtcttt tctataact  
 gggttacatg gtttaactca cttaaaatta acaggaaaatc atgccttaca gagcttgata  
 tcatctgaaa actttccaga actcaaggtt atagaaatgc cttatgctta ccagtgtctg  
 gcatttggag tgtgtgagaa tgcctataag atttctaagc aatggaataa aggtgacaac  
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 gaccttgaag atttctgtct tgactttgag gaagacctga aagcccttca ttcagtgacg  
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 ggttttttgt ccatttttgc ttcagaatca tctgttttcc tgcctactct ggcagccctg  
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 agcaccatgg gctacatgggt cgctctcatc ttgctcaatt cctttgtctt cctcatgatg  
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 gactgctcta tggtaaaaaa cattgcccctg ttgctcttca ccaactgcat cctaaactgc  
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 ataaagtta tcttctgtgt ggtagtcaca cttcctgcat gtctcaatcc ctttctctac  
 atcttgttca atcctcactt taaggaggat ctgggtgagcc tgagaaagca aacctacgtc  
 tggacaagat caaacaccc aagcttgatg tcaattaaat ctgatgatgt cgaaaaacag



422	36534	G Protein- Coupled Receptor GPR49	NP_003658.1	<p> tctgtgact caactcaagc cttggttaacc ttaccagct ccagcatcac ttatgacctg  cctcccagtt ccgtgccatc accagcttat ccagtgactg agagctgcca tctttcctgt  gtggcatttg tcccatgtct ctaa  MDTSLRGVLL SLPLLIQLAT GSSSPRSGLV LRGPPTHCHC EPDGRMLLRV DCSDLGSL P  PSNLSVFTSY LDLSMNNISQ LLPNPLPSLR FLEELRLAGN ALTYIPKGAF TGLYSLKVL M  LQNNQLRHVP TEALQNLRSI QSLRLDANHI SYVPPSCFSG LHSRLHMLD DNALTEIPVQ  AFRSLSAIQA MTLALNKIHH IPDYAFGNLS SLVVLHLHNN RIHSLGKKCF DGLHSLDTLD  LNNYNNLDEFP TAIRTLNLK ELGFHSNNIR SIPEKAFVGN PSLLTIHFYD NPIQFVGRSA  FQHLPELRTL TLNGASQITE FPDITGTANL ESLLTGAQI SSLPQTVCNQ LPNLQVLDLS  YNLLEDLPF SVCKLQKID LRHNEIYEIK VDTFQQLLS RSLNLAWNKI AIIHPNAFST  LPSLIKLDLS SNLLSFPIT GLHGLTHLKL TGNHALQSLI SSENFPPELV IEMPYAYQCC  AFGVCEINAYK ISNQWNKGDN SSMDDLHKDD AGMFOAQDER DLEDFLLDFE EDLKALHSVQ  CSPSPGPFKP CEHLLDGWL I RIGVWTIAVL ALTCLNALVTS TVERSPLYIS PIKLLIGVIA  AVNMLTGVSS AVLAGVDAFT FGSEFARHGAW WENGVGCHVI GFLSIFASES SVFLTLAAL  ERGESVKYSA KFETKAPFSS LKVIILLCAL LALTMAAVPL LGGSKYGASP LCLPLPFGEF  STMGYMVALI LINSICFLMM TIAYTKLYCN LDKGDLENIW DCSMVKHIAL LLFTNCILNC  PVAFLSFSSL INLTFIISPEV IKFILLVVVP LPACLNPILLY ILFNPHFKEF LVSLRKQTYV  WTRSKHPSLM SINSDDVEKQ SCDSTQALVT FTSSSITYDL PPSSVPSPAY PVTESCHLSS  VAFVPC L </p>	Homo sapiens
423	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NM_004736	<p> actagagatg gcgggcgggc tgctctgaag agacctcggc ggcgcgaggag gaggagagaa A  gcgcagcgcc gcgcgcgcgc ggggcccatg tggggaggag tcggagtcgc tgttgcgcgc  gccgcctgta gctgctggac ccgagtgga gtgagggga aacggcagga tgaagtgcgc  cgagcacctc tccgcgcaca tcactccga gtggaggaa caatacatcc agtatgaggc  tttcaaggat atgctgtatt cagctcagga ccaggcacct tctgtggaag ttacagatga  ggacacagta aagaggatt ttgccagtt tgaagagaag ttttccaaa cctgtgaaaa  agaacttgcc aaaaatcaaca ctttttattc agagaagctc gcagaggctc agcgagggtt  tgctacactt cagaatgagc ttcagtcac actggatgca cagaaagaaa gcactggtgt  tactacgctg cgacaaacgca gaaagccagt cttccacttg tcccatgagg aacgtgtcca  acatagaaat attaaagacc ttaactggc cttcagtgag tttacacctca gtctaatcct  gctgcagaac tatcagaatc tgaattttac aggttttcga aaaatcctga aaaagcatga  caagatcctg gaaacatctc gtggagcaga ttggcgagt gctcacgtag aggtggcccc  atthttatac tgcaagaaaa tcaaccagt tatctctgaa actgaggctg tagtgaccaa  tgaacttgaa gatggtgaca gacaaaaggc tatgaagcgt ttacgtgtcc cccctttggg  agctgctcag cctgcaccag catggactac ttttagagtt ggcctatttt gtggaatatt  cattgtactg aatatatccc ttgtgcttgc cgctgtattt aaactgaaa cagatagaag  tatatggccc ttgataagaa tctatcgggg tggctttctt ctgattgaat tcctttttct  actgggcac aacacgtatg gttggagaca ggctggagta aacctgtac tcatctttga  acttaaatccg agaagcaatt tgtctcatca acatctctt gagattgctg gattcctcgg  gatattgtgg tgcctgagcc ttctggcatg cttctttgct ccaattagtgc tcatccccac  atatgtgtat ccacttgccc tttatggatt tatggttttc ttccctatca acccaaccaa  aactttctac tataaatccc ggttttggct gcttaaaactg ctgtttcgag tatttacagc </p>	Homo sapiens

424	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NP_004727.1	<p>cccttccat aaggtaggct ttgctgattt ctggctggcg gacagctga acagcctgtc  agtgatactg atggacctgg aatatatgat ctgcttctac agtttgagc tcaaatggga  tgaagtaag ggcctgttgc caataattc agaagaatca ggaatttgc acaatatac  atatggtgtg cgggccattg ttcatgtcat tctgtcttgg ctgccttca tccagtgcct  gcgcgatat cgagacacaa aaaggccctt tctcatatta gttaatgtcg gcaagtactc  cacaacttcc ttcatggttg cgtttgcagc cctttacagc actcacaag aacgaggtca  ctcgacact atggtgttct ttaccctgtg gatgtcttct tatacatca gttcctgcta  taccctcatc tgggatctca agatggactg ggtctcttct gataagaatg ctggagagaa  cactttcctc cgggaagaga ttgtataccc ccaaaaagcc tactactact gtgccataat  agaggatgtg attctgcgtt ttgcttggac tatccaaatc tgcattacct ctacaacttt  gttgccctcat tctggggaca tcattgtctac tgccttggcc ccacttgagg ttttcggcg  atttgtgtgg aacttctcc gcctggagaa tgaacatctg aataactgtg gtgaattccg  tgctgtgcgg gacatctctg tggccccctt gaacgagat gacagactc tctagaaca  gatgatggac caggatgatg ggtacgaaa ccgcagaag aatcgggtcat ggaagtacaa  ccagagcata tccctgcgc ccctgcgcct cgttctcaa tccaaggctc gtgacactaa  ggtattgata gaagacacag atgatgaagc taacacttga atttctgaa gtctagctta  acatcttttg ttttctact ctacaactct tctctgacc aacgcaacct ctagtacctt  tccagccgaa aacaggagaa aacacataac acatcttccg agctcttccg gatcggatcc  tatggactcc aaacaagctc actgtgttct tttcttcttct tctgtgttca atttaattt  tctattttca aaacaagtat ttacttctatt tgccaatcag aggatgtttt aagaacaaa  acatagtatc ttatggattg ttacaaatca caaggacata gatacctatc aggatgaaga  acaggcattg caaggacctc ctgatgggac ggtactgaga tatctcggct tccgtcagc  ccggttttga atggtgaaa ccggacattg gtttttaaat ttttctcag ttatgtgga  gaattttttt ctttcttca taccagcgc aaaggcactg gccgacttg caggaagaat  gcaacttaaa gcagtacctt cattcatgaa gctacttttt aatttgatgt aacttttctt  attttgggaa ggtgtgctgg gtgggtggga aatatgatgt atttgttaca catagttttc  tcattattta tgaacttaaa ccatacagaa tgatataact cctgtgcaat gaagtgata  acagtaaaag aaggcaggag aaaaaaaaa</p>	Homo sapiens
				<p>SAQDQAPSVE VTDEDTVKRY FAKFEKFFQ P  LQSSLDAQKE STGVTLRQR RKPVFHLSHE  LNFTGFRKIL KKHDKILETS RGADWRVAHV  RQKAMKRLRV PPLGAAQPAP AWTTFRVGLF  IYRGGFLIE FLFLGINTY GWRQAGVNHV  LLACFFAPIS VIPTYVYPLA LYGFVFFLI  FADFWLADQL NSLSVILMDL EYMICFYSLE  VQCIPAWLRF IQCLRRYRDT KRAFPHLVNA  FYLWIVFYII SSCYTLIWDL KMDWGLFDKN  FANTIQISIT STTLLPHSGD IIATVFAPLE  VAPLNADDQT LLEQMDQDD GVRNRQKNRS  RDTKVLIEDT DDEANT</p>	

425	40881	Lung Seven Transmembran e Receptor 2 (LJSTR2)	AX073578	agagatggca gtgagcgaga ggagggggct cggcccgggg agccccggg agtgggggca A gcggctactt ctgggtgctgc tgtgggtgg ctgtccggg cgcaccacc ggctggcgct sapiens gacgggggag aagcgagcgg acatccagct gaacagcttc ggttttaca ccaatggctc tctggaggtg gagttagcgg tccctgggct gggcctcgg gaggcagaag agaagtccct gctgggtggg ttcatgtctca gccgggttcg gtctggcaga gtctgtcctt attcaaccgg ggatttccag gactgcccct tccagaaaaa cagtagcagt ttcttggtcc tgttctctcat caacaccaag gatctgcagg tccaggtgcg gaagtatgga gacgagaaga cgttgtttat ctttcccggt ctcctccggg aagcaccctc caaacaccggg ctcccgaagc cacaggccac agtccccgc aaggtggatg gcggaggagc ctctgcagcc agcaagccca agtcaacacc cgagtgatt cagggtccta gtgggaagga caaggacctg gtgttgggctc tgagccacct caacaactcc tacaacttca gtttccacgt ggtgatcggc tctcaggcgg aagaaggcca gtacagcctg aacttccaca actgcaacaa ttcagtgcca ggaaggagc atccattcga catcacggtg atgacccggg agaagaacc cgatggcttc ctgtcggcag cggagatgcc ccttttcaag ctctacatgg tcatgtccgc ctgttccctg gccgttgga tcttctgggt gtccatcctc tgcaggaaaca cgtacagcgt cttcaagatc cactggctca tggcggcctt ggccttcacc aagagcatct ctctcctctt ccacagcatc aactactact tcatcaacag ccaggggcac cccatcgaag gccttgccgt catgtactac atcgacacc tgctgaaggg cgccctcctc ttcatacca tgcacctgat tggctcaggc tgggcttca tcaagtacgt cctgtcggat aaggagaaga aggtccttgg gatcgtgat cccatgcagg tccctggccaa cgtggcctac atcatcatcg agtcccgga acctcatctg ctgtgtgacc agcgactacg tgctgtgaa ggagattttg ttcctggtgg acctcatctg ctgtgtgacc atcctgttcc ccgtagtctg gtccatccgg catctccagg atgcgtctgg cacagacggg aagtgggcag tgaacctggc caagctgaag ctgttccggc attactatgt catggctcatc tgctacgtct acttcaccgg catcatcgcc atcctgtctg aggtggctgt gccctttcag tggcagtggc tgtaccagct cttgggtggg ggtccacccc tggccttctt cgtgctcagc ggtacaagt tccagccccac agggaaacac cgtacctgc agtgcccca ggaggacag gaggatgttc agatggagca agtaatgacg gactctgggt tccgggaagg cctctccaaa gtcaacaaaa cagccagcgg gcgggaactg ttatgatcac ctccacatct cagaccaaa ggtcgtctc cccagcatt tctcactcct gcccttctc cacagcgtat gtggggaggt ggagggggtc catgtggacc aggcgccccag ctccccggga ccccggttcc cggacaagcc catttggaa gaggatccct tcctcccccc aaatatggg cagccctgtc ctacccccg gaccacccct cccttccagc tatgtgtaca ataatagacca atctgtttg ct 7426 40881 Lung Seven Transmembran e Receptor 2 (LJSTR2)	CAC28410.1	GACRIHRLT GEKRAIQLN SFGFTNGSL P EVELSVLRG LRAEERKSL VGFSLSRVS GRVRSYSTRD FQDCPLQKNS SSFLVLFLIN TKDLQVQVRK YGEQKTLFIF PGLLPEAPSK PGLPKPQATV PRKVDGGGS AASKPKSTPA VIQPSGKDK DLVLGLSHLN NSYNFSFHV IGSAEEGQY SLNFHNCNS VPGKEHPFDI TVMIREKNPD GFLSAAEMPL FKLYMMSAC FLAAGLFWVS ILCRNTYSVE KIHWMALA FTKSISLLFH SINYFYFINSQ GHPIEGLAVM YVIAHLKGA LLFITALIG SGWAFIKYVL SDKEKKVFGI VIPMQVLAVY AYIIIESREE GASDYVLWKE ILFLVDLIC GAILFPVWVS IRHLQDASGT DGKVAVNLAK LKLFRRHYVM VICVYFTRI IAILQVAVP FQWQWLYQLL VEGSTLAFFV LTGYKFKQPTG NNPLYQLPQE DEEDVQMEQV MTDGFRGL SKVNKTASGR
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427	42697	G Protein- Coupled Receptor GPR64	NM_005756	ELL	Homo sapiens
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				ctcgcggtca ggatgggttt ctctgtcagg cagtgtggcc atgttggcag aactgaagaa	
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atttcaagt aatgttggat ctacagactaa ccatagtaaat aatacacatt tctgtgagtg  
ctgacttgtc ttgcaatat tctctttctg atttatttaa tttcttgta tttatatgtt  
aaaaatcaaa atgttataat caatgaata aattgacagt taaga

428 42697 G Protein- NP\_005747.1 MFVSVRQCGR VGRTEEVLLT FKIFLVIIICL HVVLVTSLEE DTDNSSLSPK PAKLSVVSFA P Homo  
Coupled PSSNEVETTS LNDVTLSLLP SNETEKTIT IVKTFNASGV KPQNICNLS SICNDSAFFR sapiens

429	45937 KIAA1624 Protein	AF376725	gagcgcgtctg gcgcgcgcgcgc gctccccgc	ctccccgcgt cctagcgctgg A	Homo sapiens
			gaacaaacat ggcgcgtctg gcgcgcgcgcgc gctccccgc	ctccccgcgt cctagcgctgg A	
			ccgcgggcct ccgctgctc ccaatgctgg gtttgtgca	gttgctggcc gagctggcc	
			tggccgcgt ccacacctg gcactcaagg atgatgtgag	gcataaagt catctgaaca	
			cccttggtctt ctcaaggat gggtagatgg tggtagatgt	cagtagcctc tcactgaatg	
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310/448

430	45937	KIAA1624 Protein	AAK57695	<p>tggagtccgt tgtgacaaca tctggggtga tggaaagtat gaagaaagtc aagaagggtga  caaagcgtc cgtggagccc caggcgaggt gggagggcgc cgtgtgacag agccgaccct  gaggtggca ctgtccaagg aaactgttaa cttattcata gtctattgg acagcaggag  cagctcctac agtgaactat tggcaccacc gacagtgaac ccagggcaca tggctggagc  acagtgcgc ggaacacctg ttttgtactc tcttttatgg aaacgatctg tggctgttta  gaggcagctg gatacctctt caggcgggaa tgggagggcg ggcacaggga gaggagagag  aagagaaaag gaagaattca ttttaattt aggtttctt tttcttctt catttcggag  ctctaaggtg tatgcagttg tgaccccatg tgtggggaag ttagcaagg acggtcgtgtg  gagggggaag gaggtgcga ggtgtctgtc tgatgcttta ggaatgtct actgaggacc  ctgggactta agaagaagg cggggagagt gccattgcct gtttgggaga caaaatgaa  cgaaaacagg tgacttttga aagcaaaagtc aaacccagt ttaggatgta gcacctgccc  caggattcct gccctcggct ttgccccaga ccttattcc agatgctgag agtgaccagg  acagcagtc ctgaggccca gtggtcttct tccaacagg aaaagaaggc tgtgatgtcg  ctgtcaggat catgccctgt ggcacagcac aggtggtggg aggtggttt ctgactgaga  tgttgctga tggatggaaa gaaatgtatt ttaagtcca aaagcatta tctgtggcg  ttgcctggac atccactccc tgacagccca gagcagcact gtctggtctt ccttcagtct  tgtggtttg ttgtgttga tcagaaattt ggggaaatg gaaagtttt ctcaaggagc  agctggggc agaataagta gtatttaagc aaataactaa gtccaagcaa atcatcccca  ttaaaaagct tttcctgtag gctagtagga aaaaaaaa aaaaaa</p>	Homo sapiens
				<p>MAALAPVGGP ASRGPRLAAG LRLPLMLGLL QLLAEPGLGR VHHLALKDDV RHKVLHNTFG P  FFKDGVMVN VSSLNEPE DKDVTIGFSL DRTKNDGFSS YLDEDVNYCI LKKQSVSVTL  LILDISRSEV RVKSPPEAGT QLPKIIFSRD EKVLGQSQEP NVNPASAGNQ TQKTQDGGKS  KRSTVDSKAM GEKSFSVHNN GGAVSEQFF NISTDDQGL YSLYFHKCLG KELPSDKFTF  SLDIEITEKN PDSYLSAGEI PLPKLYISMA FFFFLSGTIW IHLKRNRND VFKIHWLMAA  LPFTKSLSLV FHAIDYHYS SQFPFIEGWA VVYIITHLLK GALLFITIAL IGTGWAFIKH  ILSDKDKKIF MIVIPLOVLA NVAYIIEST EEGTEYGLW KDSLFLVDLL CCGAILFPVV  WSIRHLQEAS ATDGKAAINL AKLKLFRHY VLVICYIYFT RIIAFLIKLA VPFWKWLQ  LLEDETATLVE FVLTYGKFRP ASDNPYLQLS QEEEDLEMES VVTISGVMES MKKVKKVTNG  SVEPQGEWEG AV</p>	
431	50847	Neurotensin Receptor type 2	NM_012344	<p>gagtgaagg gaggagcgc cggccgcggg agcgggatgg aaaccagcag cccgcggccc A  ccgcggcca gctccaaccc ggggtgagc ctggagccc ggtgggctg gacactcgc  ctctgggcca aggtgctgtt caccgcgtc tacgactca tctggcgct ggcgcggcg  ggcaatgcgc tgtccgtgca cgtggtgctg aagcgcgcg cgggcgcctg  cgccaccacg tgctcagcct ggcgctcgc ggcctgctg tctgctgtgt cggcgtgccc  gtggagctct acagcttctg gtggttccac taccctggg tcttcggcga cctgggctgc  cgcggtact acttcgtgca cgagctgtg gcctacgcca cgggtgctgag cgtggcaggc  ctgagcgccg agcgtgcct agcgtgtgc cagccccgc gtgccgcag cctgctgacg  ccacgccga cccggtggct ggtggcgctc tctggggccg cctcgcctg cctcgcctg  cccatggccg tcatcatggg gcagaagcac gaactcgaga cggcgggagc ggagccggag  cccgctcgc gagtgtgcac ggtgctggtg agccgcaccg cgctccagt cttatccag  gtgaatgtgc tgggtctctt cgtgctccc ttggcactaa ctgcttctt gaatggggctc</p>	Homo sapiens

432	50847	Neurotensin Receptor type 2	NP_036476.1	<p>acagtgaacc accgtctggc cctctgctcc caagtgcctg ccaattctac cccggggcagc  tccaccccc gccgcctgga gctgctgagt gagagggtc tctcagctt catcgtatgg  aagaagacct ttatccagg aggccaggct agctctggta gacataaaga cgtgcgccgg  atccgcagcc tccagcgag cgtccagggt ctcagagcca tcgtggtcat gtagtctac  tgctggctgc cgtaccatgc ccgcaggctc atgtactgct acgtacctga tgacgcgtgg  actgacccac tgtacaattt ctaccactac tctctctac aacgcctgtt cctcctctt cagaaaaactc  gtcagctcag ctgtgactcc cctgtgctc cctgtgtgga gagcaccacc ccatgaagcg gttacccccg  ttcctggaag ccgtcagctc cctgtgtgga aatgaacag acaagcaaa atgaccagct gcttagtcac  aagccccaga gtcccacct aatggataca gcttcaggct ttggggatcc ccagaaaaacc  cggacctgaa tgtaaatgcaa gaatgaacag acaagcaaa atgaccagct gcttagtcac  ctggcaaaag aggtgagcaa cctcatcact aatcattcaa gcttcgagc caggcgact  tctatcaacc cctgctctgc tgagaacct caagcgagc gaagccacgt gaccctcct  agcctcagc tcctcgtct gtgtagtga gataaagaac agcaccatc tcttagtgtt  gctgagact aaagtgtcta gcacagaacc tgggtcgtag tagatgctca ataaattttt  gctggcacg</p>	Homo sapiens
433	53440	G Protein- Coupled Receptor LS53440	AX107037	<p>RAGNAGRLRH HVLSLALAGL LLLLGVFVE LYSFWMFHY WFGDLGCRG YYFVHELCA  ATVLSVAGLS AERCLAVCQP LRARSLTPR RTRWLVALSW AASGLALPM AVIMGQKHEL  ETADGEPEPA SRVCTVLVSR TALQVFIQVN VLVSFVLPLA LTAFLNGVTV SHLLALCSQV  PSTSTPGSST PSRLLESEE GLLSFIVWKK TFIQGGQVSL VRHKDVRRIR SLQRSVQVLR  AIVVMYVICW LPYHARLMY CYVPDDAWTD PLYNFHYFY MVTNLFYVS SAVTPLLYNA  VSSFRKFLF EAVSSICGEH HPMKRLPPKP QSPTLMDTAS GFQDPPETRT</p>	Homo sapiens
				<p>cagagaggct gatttcagt gcagcctgcc agacctctt tggaggaaga ctggacaaag A  ggggtcacac attcttcca taccgttgag cctctacctg cctggtgctg gtcacagttc  agcttctca tgaagggtga tcccaatggc aatgaatcca gtgtacata ctctacctc  ataggcctcc ctggtttaga agaggctcag ttctggttgg ccttccatt gtgtccctc  taccttattg ctgtgctagg taacttgaca atcatctaca ttgtcggagc tgagcacagc  ctgcatgagc ccatgtatat atttcttgc atgctttcag gcattgacat cctcatctcc  acctcatcca tgcacaaaat gctggccatc ttctggttca attccactac catccagttt  gatgcttgct tgctacagat ttttgccatc cactccttat ctggcatgga atccacagtg  ctgctggcca tggcttttga ccgctatgtg gccatctgtc acccactgag ccatgccaca  gtacttacgt tgcctcgtgt caccaaaatt ggtgtggctg ctgtggtgag gggggctgca  ctgatggcac ccttctctgt cttcatcaag cagctgacct tctgcgctc caatatctt  tccattctct actgcttaca ccaagatgtc atgaagctgg cctgtgatga tatccgggtc  aatgtcgtct atggccttat cgtcatcact tccgcatgtg gcctggactc acttctcatc  tccttctcat atctgcttat tcttaagact gtgtgggct tgacacgtga agccagggc  aaggcatttg gcaattgctt ctctcatgtg tgtgctgtgt tcatattcta tgaaccttc  attggattgt ccatggtgca tgcctttagc aagcggcgtg actctccgct gcccgctc  ttggccaata tctatctgct ggttctctct gtgtcaacc caattgtcta tggagtgaag  acaaaggaga ttgcacagcg catccttga ctttccatg tggccacaca cgttcagag  ccctaggtgt cagtgatcaa acttcttttc cattcagagt cctctgattc agattttaat</p>	



gttaacattt	tggaagacag	tattcagaaa	aaaaatttcc	ttataaaaa	atacaactca
gatccttcaa	atatgaact	ggtggggaa	tctccatttt	ttcaatatta	ttttcttctt
tggtttcttg	ctacataata	ttattaatac	cctgactagg	ttgtggttgg	agggttatta
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ttctgatagg	cagtgggtt	aggagccac	cagttatgat	gggaagtatg	gaatggcagg
tcttgaagat	aacattggcc	ttttgagtgt	gactcgtagc	tggaagtga	gggaatcttc
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aaaaataaagt	actattgtgt	caagaaaaaa	aaaaaaaaa	aaaaaaaaa	aaaaaaaaa
aaaaaaaaa	aaaaaa				
MMVDPNGNES	SATYFILIGL	PGLEEAQFWL	APFLCSLYLI	AVLGNLTIIY	IVRTEHSLHE P
PMYIFLCMLS	GIDILISTSS	MPKMLAIFWE	NSTTIQFDAC	LLQMFAlHSL	SGMESTVLLA
MAFDYVAIC	HPLRHATVLT	LPRVTKIGVA	AVVRGAALMA	PLPVFIKQLP	FCRSNILSHS
YCLHQDVMKL	ACDDIRVMW	YGLIIVISAI	GLDSLLISFS	YLLILKTVLG	LTREAQAKAF
GTCVSHVCV	FIFYVPFIFL	SMVHRESKRR	DSFLPVILAN	IYLLVPPVLN	PIVYGVKTKE
IRQRILRLFH	VATHASEP				

Homo  
sapiens53440 G Protein-  
Coupled  
Receptor  
LS53440

434

435	54053	Gaba (b) Receptor 2	NM_005458	atgggttccc	cgcgagggtc	cgggcagcca	ggcgggccgc	cgccgcgcgc	accgcgcgcc	A	Homo sapiens
				gcgcgcctgc	tactgtact	gctgtgccc	ctgtgtgctgc	ctctggcgcc	cggggcctgg		
				ggctgggcgc	ggggcgcccc	ccggcgccgc	cccgagcgc	cgccgctctc	catcatgggc		
				ctcatgcccgc	tcaccaagga	ggtggccaa	ggcagcatcg	ggcgcggtgt	gctccccgc		
				gtggaaactgg	ccatcgagca	gacccgcaac	gagtcactcc	tgcgccctta	cttccctcgac		
				ctgcggctct	atgacacgga	gtgcgacaac	gcaaaagggt	tgaaagcctt	ctacgatgca		
				ataaaatacy	ggccgaacca	cttgatggtg	tttggaggcg	tctgtccatc	cgtcacatcc		
				atcattgcag	agtcctccca	aggctggaat	ctgggtgcagc	tttcttttgc	tgcaaccacg		
				cctgttctag	ccgataagaa	aaaataccct	tatttctttc	ggaccgtccc	atcagacaat		
				gcggtgaatc	cagccattct	gaagtgtctc	aagcactacc	agtggaaagc	cgtagggcac		
				ctgacgcaag	acgttcagag	gttctctgag	gtgcggaatg	acctgactgg	agttctgtat		
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				gagagaatgg	ggaccattaa	atttactcaa	tttcaagaca	gcaggaggt	gaagggtggga		
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				atccgccttc	tcctggagca	ctgtgagaac	accatatga	ccatctggct	tggtcatcgtc		
				tatgcctaca	agggaattct	catgtgttc	ggttgtttct	tagcttgga	gacccgcaac		
				gtcagcatcc	ccgcactcaa	cgacagcaag	tacatcgga	tgagtgtcta	caacgtgggg		
				atcatgtgca	tcateggggc	cgctgtctcc	ttctgacc	gggaccagcc	caatgtgcag		
				ttctgcacgc	tggtcttggt	catcatcttc	tgacgacca	tcacctctg	cctgggtattc		
				gtgccgaagc	tcataccct	gagaacaaac	ccagatgcag	caacgcagaa	caggcgattc		
				cagttcactc	agaatcagaa	gaaagaagat	tctaaaacgt	ccacctcggt	caccagtgtg		
				aaccaagcca	gcacatcccc	cctggagggc	ctacagtcag	aaaaccatcg	cctgcgaatg		
				aagatcacag	agctggataa	agacttgga	gaggtcacca	tgacgtgca	ggacacacca		

436	54053	Gaba (b) Receptor 2	NP_005449.1	MASPRRSQP GRPPPPPPP ARLLLLLLP LLLPLAPGAW GWARGAPRPP PSSPPLSIMG P LMPLTKEVAK GSIGRGVLP VELAIEQIRN ESLLRPYFLD LRLYTECDN AKGLKAFYDA IKYGNHLMV FGGVCSVTS IIAESLQGN LVQLSFAATT PVLADKKYP YFFRTVPSDN AVNPAILKLL KHYQWKRVT LTQDVQRFSE VRNDLTGVLY GEDIEISDTE SFSNDPCTSV KKLKGNVRI ILGQFDQMA AKVFCCAYEE NMYGSKYQWI IPGWYPSWW EQVHTEANSS RCLRKNLLAA MEGYIGVDFE PLSSKQIKTI SKTPQQYER EYNNKRSVG PSKFHGYAYD GIWVIKTLQ RAMETLHASS RHQRIQDFNY TDHTLGRILL NAMNETNFFG VTGQVVRNG ERMGTIKFTQ FQDSREVKVG EYNAVADTLE IINDTIRFQG SEPPKDKTII LEQLRKISLP LYSILSALTI LGMIMASAFI FFIKNRNQK LKMSPPYMN NLIILGGMLS YASIFLFGLD GSFVSEKTFE TLCTVTRTWIL TVGYTTAFGA MFAKTWRVHA IFKNVMKMKK IIKDQKLLVI VGGMLLIDLC ILICWQAVDP LRRTVEKYSM EPDPAGRDIS IRPLLEHCEN THMTIWLGV YAYKGLMLF GCFLAWETRN VSIPALNDSK YIGMSVYNVG IMCIIGAAYS FLTRDQPNVQ FCIVALVIF CSTITCLVF VPKLITLRTN PDAATQNRRE QFTQNKKEK SKTSTSVTSV NQASTSRLEG LQSENHRLRM KITELDKDLE EVMQLQDTP EKTYYIKQNH YQELNDILNL GNFTSTGG KAILKNHLDQ NPQLQWNTTE PSRTCKDPIE DINSPEHIQR RLSLQLPILH HAYLPSIGGV DASCVSFVS PTASPRHRV PSFRVMVSG L	Homo sapiens
547	55728	ETL protein	NM_022159	gtgaaattta aactccagtc ctgtggcgaa aatgctaatt gcactaacac agaaggaagt A tattattgta tgtgtgtacc tggcttcaga tccagcagta accaagacag gtttatcact aatgatgaa cgtctgtat agaaaatgtg aatgcaaat gccatttaga taatgtctgt atagctgcaa atattataa aactttaaca aaatcagat ccataaaga acctgtggt ttgctacaag agtctatag aaattctgtg acagatcttt caccaacaga tataattaca tatatagaaa tattagctga atcatcttca ttactaggtt acaagaacaa cactatctca gccaaaggaca ccttttctaa ctcaactctt actgaatttg taaaaacctg gaataatttt gttcaaaagg atacatttgt agtttgggac aagttatctg tgaatcatag gagaacacat cttcaaaaac tcatgcacac tgttgaacaa gctactttaa ggatatccca gagcttccaa aagaccacag agtttgatac aaattcaacg gatatagtct tcaaaagtitt cttttttgat tcatataaca tgaacatat tcatctcat atgaatattg atggagacta cataaatata tttccaaaaga gaaaagctgc atatgattca aatggcaatg ttgcagttgc atttttatat tataagagta ttggtcctt gctttcatca tctgacaact tcttattgaa acctcaaaat tatgataatt ctgaagagga gaaagagtc atattctcag taatttcagt ctcaatgagc tcaaaacccac ccacattata tgaacttgaa aaaaatacat ttacatttag tcatcgaaag gtcacagata ggtataggag tctatgtgca ttttggaatt actcacctga taccatgaat ggcagctggt cttcagaggg ctgtgagctg acatactcaa atgagaccca cactcatgc cgctgtaac acctgacaca ttttgcaatt ttgatgtcct ctggtccttc cattggtatt	Homo sapiens

438	55728	ETL protein NP_071442.1	MCVPGFRSSS NQDRFITNDG TVCIENVNAN CHLDNVCIAA NINKTLTKIR SIKEPVALLQ P	Homo sapiens
			EVYRNSVTDL SPFDIITYIE ILAESSLLG YKNNTISAKD TLSNSTLTFE VKTVNNFVQR	
			DTFVVDKLS VNHRRTHLTK LMHTVEQATL RISQSFQKTT EFDNSTDIA LKVFFFDSYN	
			MKHIHPHNM DGDYINIFPK RKAAYDSNGN VAVAFLYYKS IGPLLSSSDN FLLKPQNYDN	
			SEEEERVISS VISVSMSSNP PTLYELEKIT FTLSHRKVTD RYRSLCAFWN YSPDTWNGSW	
			SSEGCELTYS NETHTSCRN HLTHFAILMS SGPSIGIKDY NILTRITQLG IISLICLAI	
			CIFTFFFESE IQSTRTHHK NLCCSLFLAE LVFLVGINTN TNKLFCSIIA GLLHYFFLAA	
			FAWMCIEGIIH LYLIIVGVYIY NKGFLHKNFY IFGYLSPAVV VGESAALGYR YYGTTKVCWL	
			STENNFIIWSE IGPACLIILV NLLAFGVIIY KVFRHTAGLK PEVSCFENIR SCARGALALL	
			FLLGTTWIFG VLHVWHASW TAYLFTVSNA FQGMFIFLFL CVLSRKIQEE YYRLFKNVPC	
			CFGCLR	
439	56923	Muscarinic NM_000740 acetylcholine Receptor M3	atgaccttgc acaataacag tacaacctgc cctttgtttc caaacatcag ctccctctgg A atacacagc cctccgatgc agggctgcc ccgggaaccg tcaactattt cggcagctac aatgtttctc gagcagctgg caatttctcc tctccagacg gtaccaccga tgaccctctg ggaggtcata ccgtctggca agtgggtctc atcgctttct taacgggcat cctggccttg gtgaccatca tcggcaacat cctgggtaatt gtgtcattta aggtcaacaa gcagctgaag	Homo sapiens

aaagattata atattcttac aaggatcact caactaggaa taattatttc actgatttgt  
 cttggccatat gcatttttac cttctgggtc ttcagtgaac ttcaaaagcac caggacaaca  
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 attcttgcta atctctggc ttttggagtc atcatataca agttttttcg tcacactgca  
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 ccaattatta actactagac aaaaagtatt ttaaatcagt ttttctgttt atgctatagg  
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 aggaaccac tggcttgata tttctgtgac tctgtgtgcc ttgaaacta gtcccctacc  
 acctcggtaa tgagctccat tacagaaagt ggaacataag agaataagg ggcagaatat  
 caaacagtga aaagggaatg ataagatgta ttttgaatga actgtttttt ctgtagacta  
 gctgagaaat tgttgacata aaataaagaa ttgaagaac acattttacc atttgtgaa  
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444	73584	Cadherin EGF NP_055061.1 LAG Seven- Pass G-Type Receptor 1 (CELSR1/Flam ingo)	cagtgaggac ccgtggcctgg cagcccgggc agtcctttgc aaaggcacc cttgtctttaa aatcacttcg ctatgtggga aaggtggaga tacttttata tatttgtatg ggactctgag gaggtgcaac ctgtatatat attgcattcg tgctgacttt gttatcccg gagatccatg caatgatctc ttgctgtctt ctctgtcaag attgcacagt tgtacttgaa tctggcatgt gttgacgaaa ctggtgcccc agcagatcaa agtggggaaa tactgcagca gtggggctaa aaccaagcgg ctagaagccc tacagctgcc ttcggccagg aagtgaggat ggtgtgggcc ctccccgcg gccccctggg tccccagtgt tcgctgtgtg tgggtttgtc ctctgctgcc atctgcccc gctgtgtgaa ttcaagacag ggcagtgcag cactaggcag gtgtgaggag ccctgctgag gtcactgtgg ggcacggttg ccacacggtt gtcatttttc acctggtcat tctgtgacca ccacccccct cctcacgcg cctccagggt gcccgggagc tgcagggtggg gatggcttg tcctttgtct ctgtccccg tgggacctgg gacctaaaag cgttgcaggt tcctgatttg gacagaggtg tggggccttc caggccgtta catacctct gccaatcttc taactctctg agactgcgag gatctccagg cagggttctc cctctggag tctgaccaat tacttcattt tgcctcaaat ggccaattgt gcagagggac aaagccacag ccacactctt caacggttac caaactgttt ttggaattc acaccaaggt cgggcccact gcaggcagct ggcacagcgt ggcccagggg gctgtggaac ggggtcccgga actgtcagac atgtttgatt ttagcgtttc ctttgttctt caaatcaggt gcccaataa gtgacagca cagctgcttc caaataggag aaaccataaa ataggatgaa aatcaagtaa aatcacaaga tgtccacact gttttaaaact tgacctgat gaaaatgga gcactgttag cagatgccta tgggagagga aaagcgtatc tgaataatggt ccaggacagg aggatgaaat gagatccag agtcctcaca cctgaatgaa ttatacatgt gccttaccag gtgagtggtc ttctgaagat aaaaaactct agtcctctta aacgtttgcc cctggcggtt cctaagtagg aaaaaggttt taagtcttcg aacagtctcc ttctcatgact ttaacaggat tctgccccct gaggtgtaat tttttgttc tatttttttc cagctactcc acagccaaca gtcagtttta ttgagatggg aaaaatgtaa acctatttt actgttacca aaaaacaact gtcagtttta ttgagatggg aaaaatgtaa acctatttt attaactaag actttatggg agagattaga cactggaggt ttttaacaga acgtgtattt attaatgttc aaacacactg aattacaaat gagaagagtc tacaataaat taagattttt gaattgtac ttctgcggtg ctggtttttc tccacaaa cccccccc tccccatgcc cagggtggcc gtggaaggga cggtttacgg acgtgcagct gagctgtccg tgtccccatgc tccctcagcc agtggaacgt gccggaactt ttgtccatt ccttagtagg cctgcccacag cctagatggg cagtttttgt ctttcacca atttgaggac tttttttttt tgccattatt tcttcagttt tctttcttg cactgatctt tctcctctcc tctgtgact ccagtgactc agacgttaga cctcttgatg ttttccact ggtccctgag gctctgtc MAPPPPPVLP VLLLLAAAA LPAMGLRAA WEPVPVGGTR AFALRPGCTY AVGAACTPRA P Homo PRELLDVGRD GRLAGRRVS GAGRPLPLQV RLVARSAFTA LSRRRLRARTH LPGCGARARL sapiens CGTGARLCA LCFVPGGCA AAQHSALAP TTLACRCPP RPRPRCPGRP ICLPPGGSVR IRLLCALRA AGAVRVGLAL EAATAGTPSA SPSPSPPLPP NLPEARAGPA RRARRGTSGR GSLKFPMPNY QVALFENEPA GTLILQLHAH YTIEGEEERV SYMMEGLFDE RSRGYFRIDS ATGAVSTDV LDRETKETHV LRKAVDYST PPRSATTYIT VLKDTNDHS PVFEQSEYRE RVRENLEVG EVLTIRASDR DSPINANLRY RVLGAWDVF QLNESGVVS TRAVLDREEA AEYQLLVEAN DQGRNPGLS ATATVYIEVE DENDNYPQFS EQNYVYVQVPE DVGLNTAVLR
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VIYRTIGQL LPERYDPPRR SLRLPHRPII NTPMVSTLVY SEGAPLPRPL ERPLVEFAL  
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445	74514	5-HT5A Receptor	NM_024012	LTEQTLKGRL REKLADCEQS PTSSRTSSLG SGGPDCAITV KSPGREPRD HLNQVAMNVR TGSAQADGSD SEKP atggatttac cagtgaaacct aacctccttt tccctctcca cccctccccc ttggagacc A aaccacagcc tcggcaaaaga cgacctgcgc ccagctcgc cccctgctctc ggtcttcgga gtgcttattc tcacctgtgt gggctttctg gtggcgga cgttcgctg gaacctgctg gtgctggcga ccatcctccg tctacgcacc ttccaccgcg tgccccacaa cctggtggca tccatggcgc tctcgatgt cctggtggcc gcgctggta tgcgctgag cctggtgcat gagctgccc ggcgcgcgtg gcagctaggt cggaggtgt gccagcttg gatecgtgc gacgtgcttt gctgcacggc cagcatctgg aacgtgacg ccatagccct ggaccgctac tgggtccatca cgcgccacat ggaatacacg ctccgaccc gcaagtgcgt ctccaaagtc atgatcgcgc tcaactgggc actctcgcgt gtcactctc tggccccgt gctttttggc tggggagaga cgtactctga gggcagcgag gagtgcagg taagccgga gccctctac gccgtgtct ccaccgtagg cgcctctac ctgcgcctct gtgtggtgct ctctgtgtac tggaagatct acaaggctgc caagtccgc gtgggctcca ggaagaccaa tagcgtctca cccatatccg aagctgtgga ggtgaaggac tctgccaac agccccagat ggtgttcacg gtccgccacg ccaccgtcac ctccagcca gaaggggaca cgtggcgga gcagaaggag cagcgggcgc cctcatggt gggcactctc attggcgtgt tctgtctctg ctggatcccc ttctttctca ccgagctcat cagtcctc ctactccaac tcttcttta acccctgat ctatacggct agcatcttc tgtggttgg cgccttcaag aactctttt ctaggcaaca ctga ttcaacaaga actacaacag cgccttcaag aactctttt ctaggcaaca ctga MDLPVNLTSE SLSTPSPLET NHSIGKDDLR PSSPLLSVFG VLILTLGFL VAATFAWNL P VLATILVRT FHRVPHNLVA SMAVSDVLA ALVMPLSLVH ELSGRWQLG RRLCQLWIAC DVLCTASIW NVTAALDRY WSITRMEYT LRTRKCVSNV MIALTWALSA VISLAPLLFG WGTYSEGSE ECQVSREPSY AVFSTVGAFY LPLCVLFVY WKIYKAARF VGSRTNSVS PISEAVEVKD SAKQPMVFT VRHATVTFQ EGDWREKE QRAALMVGIL IGVFVLCWIP FFLTELISPL CSCDIPAIWK SIFLWLGYSN SFFNPLIYTA FNKNYNSAFK NFFSRQH gtaatgcaga gataataaaa cttcttaggt ccatagtct tataataatt taataaccta A aacatggtat acaaatcct ccaaacccaa taacataatt atagtttcaa aaagtcccc aaactttcaa gtagattttt attgcttga tgagtggctt taaatatgaa agtcttggc tgtgaagggc aatccttttc ccgtggactg ggatctatag aaatacagaa atgtgcccag gggttcatct ccctaataac catcattcac atttctcaac ctccctaata accagccacc atgtgagaag gatccacagt tactgtttat gactataatt aactagtacc tgggactgg cagtggagt ggttgcaacc tgatgtaag gatgtcaaa ttgtctggc ctctgttccc agccagtaag taattccctg gcctcggcc ataccccta atctgttca cgtgattatg acaggcagac agcacagtaa ataacactat atattaagaa aacccaaagc atagtatca atggtatata cccaacagca tcctaggaaat ggagagtctg tagcaagggc ctccaatgtg aaggtcaaca cagtactgt gatcgtgta ttccatttt gtaaaagcatg atctctggg gtcattttta tcttctaac ttattgaaa agtctcctgt ttggggggc cgccccggg cacagccaga ctgactcagt ttccctggga ggtcccgctc ggcctcctcc tccctccc tctgccccgc ccagccctc gccccacct cggcgccgc acatctgct gctcagctcc agacggcgcc cggccccgc ggcggggat ccagccaggt gggagccccg cagatgaggt	Homo sapiens
446	74514	5-HT5A Receptor	NP_076917.1	atggatttac cagtgaaacct aacctccttt tccctctcca cccctccccc ttggagacc A aaccacagcc tcggcaaaaga cgacctgcgc ccagctcgc cccctgctctc ggtcttcgga gtgcttattc tcacctgtgt gggctttctg gtggcgga cgttcgctg gaacctgctg gtgctggcga ccatcctccg tctacgcacc ttccaccgcg tgccccacaa cctggtggca tccatggcgc tctcgatgt cctggtggcc gcgctggta tgcgctgag cctggtgcat gagctgccc ggcgcgcgtg gcagctaggt cggaggtgt gccagcttg gatecgtgc gacgtgcttt gctgcacggc cagcatctgg aacgtgacg ccatagccct ggaccgctac tgggtccatca cgcgccacat ggaatacacg ctccgaccc gcaagtgcgt ctccaaagtc atgatcgcgc tcaactgggc actctcgcgt gtcactctc tggccccgt gctttttggc tggggagaga cgtactctga gggcagcgag gagtgcagg taagccgga gccctctac gccgtgtct ccaccgtagg cgcctctac ctgcgcctct gtgtggtgct ctctgtgtac tggaagatct acaaggctgc caagtccgc gtgggctcca ggaagaccaa tagcgtctca cccatatccg aagctgtgga ggtgaaggac tctgccaac agccccagat ggtgttcacg gtccgccacg ccaccgtcac ctccagcca gaaggggaca cgtggcgga gcagaaggag cagcgggcgc cctcatggt gggcactctc attggcgtgt tctgtctctg ctggatcccc ttctttctca ccgagctcat cagtcctc ctactccaac tcttcttta acccctgat ctatacggct agcatcttc tgtggttgg cgccttcaag aactctttt ctaggcaaca ctga ttcaacaaga actacaacag cgccttcaag aactctttt ctaggcaaca ctga MDLPVNLTSE SLSTPSPLET NHSIGKDDLR PSSPLLSVFG VLILTLGFL VAATFAWNL P VLATILVRT FHRVPHNLVA SMAVSDVLA ALVMPLSLVH ELSGRWQLG RRLCQLWIAC DVLCTASIW NVTAALDRY WSITRMEYT LRTRKCVSNV MIALTWALSA VISLAPLLFG WGTYSEGSE ECQVSREPSY AVFSTVGAFY LPLCVLFVY WKIYKAARF VGSRTNSVS PISEAVEVKD SAKQPMVFT VRHATVTFQ EGDWREKE QRAALMVGIL IGVFVLCWIP FFLTELISPL CSCDIPAIWK SIFLWLGYSN SFFNPLIYTA FNKNYNSAFK NFFSRQH gtaatgcaga gataataaaa cttcttaggt ccatagtct tataataatt taataaccta A aacatggtat acaaatcct ccaaacccaa taacataatt atagtttcaa aaagtcccc aaactttcaa gtagattttt attgcttga tgagtggctt taaatatgaa agtcttggc tgtgaagggc aatccttttc ccgtggactg ggatctatag aaatacagaa atgtgcccag gggttcatct ccctaataac catcattcac atttctcaac ctccctaata accagccacc atgtgagaag gatccacagt tactgtttat gactataatt aactagtacc tgggactgg cagtggagt ggttgcaacc tgatgtaag gatgtcaaa ttgtctggc ctctgttccc agccagtaag taattccctg gcctcggcc ataccccta atctgttca cgtgattatg acaggcagac agcacagtaa ataacactat atattaagaa aacccaaagc atagtatca atggtatata cccaacagca tcctaggaaat ggagagtctg tagcaagggc ctccaatgtg aaggtcaaca cagtactgt gatcgtgta ttccatttt gtaaaagcatg atctctggg gtcattttta tcttctaac ttattgaaa agtctcctgt ttggggggc cgccccggg cacagccaga ctgactcagt ttccctggga ggtcccgctc ggcctcctcc tccctccc tctgccccgc ccagccctc gccccacct cggcgccgc acatctgct gctcagctcc agacggcgcc cggccccgc ggcggggat ccagccaggt gggagccccg cagatgaggt	Homo sapiens
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448	81765	Thromboxane A2 Receptor	NP_001051.1	<p> ctctgaaggt gtgcctgaac cagtccagc ctgcccctgt tgcagcatcg gccctgatggg  gtggtgactg atccctcagg gctccggagc catgtgccc aacggcagtt ccttgggggcc  ctgtttccgg ccacaaaaca ttaccctgga ggagagacgg ctgacgcctt cgcctgggtt  cgccgcctcc ttctgcgtgg tgggctggc ctccaacctg ctgagccctga gcgtgctggc  ggcgcgcgcg cagggggggtt cgcacacgcg ctctccttc ctcaccttc cctgcgccct  cgctcctacc gacttctctg ggctgctggt gacgggtacc atcgtgggtt cccagcacgc  cgcgctcttc gagtggcacg ccgtggaccc tggctgacct ctctgctgct tcatgggctg  cgctcatgac ttcttcggcc tgtccccgt gctgctggg ccgcccattg cctcagagcg  ctacctgggt atcacccggc ccttctcgcg ccgggggtc gctcgacg cctgctggg  ggccacgtg gggctggtgt gggcgccgc gctggcgctg ggcctgctg cctgctggg  cgctggctgc tacacctgc aatacccggt gctctggtg gtctggtgc ttctgacgc tggcgccga  gtccggggac gtggccttcg ggctgctctt ctcacgtggt ggcggcctct cggctgggct  gtcttctctg ctgaacacgg tcagcgtggc caccctgtgc cagctctacc acgggcagga  ggcgccccag cagcgtcccc gggactccga ggtggagatg atggctcagc tctggggat  catggtggtg gccagcgtgt gttggctgct ccttctggtc ttcatggccc agacagtgt  gcgaaccccg cctgcccata gcccccgcg gacgtgtcc cgcaccacgg agaaggagct  gtcatctac ttgcgctggt ccacctggaa ccagatcctg gacccctggg tgtatctct  gtcccgccgc gccgtgctcc ggcgtctcca gctcgcctc agcacccggc ccaggtcgt  gtccctccag cccagctca cgcagcgctc cgggctgcag taggaagtgg acagagcgcc  cctcccgcg ctttcccgcg agccttggc cctcggaca gccatctgc ctgttctgag  gattcagggg ctgggggtgc tggatggaca gtgggcatca gcagcagggt ttggggtga  cccaatcca accggggac cccaactcc tccctgatcc tttaccagg cactctccct  tctcgggccc ctttttccca tccagagctc ccaccccttc tctgcgtccc tcccaacccc  aggaagggca tgcagacatt ggaagagggt cttgcattgc tattttttt tttagacgga  gtcttgctct gtccccagg ctggagtga tctcctgct cagcctcctg actataggcg  acctcccggt ttcaagcgat tctcctgct cagcctcctg agtagctggg actataggcg  cgcgccacca cgccgggcta attttggat ttttagtaga gacggggtt caccgtgtg  gccaggctgg tcttgaactc ctgacctcag gtgattcacc agcctcagcc tcccaagt  ctgggatcac aggcataaac caccacacct ggccattttt tttttttt tagacggagt  ctcactctgt ggcacagcct ggagtacagt ggcacgatct cggctcactg caacctcgc  ctccgggtt caagcattc tcgtgcctca gcctcccgag cagctgggat tacaggcgta  agccactgcg ccggccttg catgctctt gacctgaat ttgacctact tgcggggta  cagtgcttc ctttgaacc tccaacaggg aagctctgt ccagaaagga ttgaatgtga  aacgggggca ccccttttc ttgcaaaat atatctctgc ctttggtttt at  </p>	Homo sapiens
				<p> MWPNSSSLGP CFPRTNITL ERRLIAPWF AASFVWGLA SNLLALSVLA GARQGGSHTR P  SSFLTELCGL VITDFLGLLV TGTIVVSQHA ALFEHVAVDV GCRICRFMGV VMIFFGLSPL  LLGAAMASER YLGITRPFSS PAVASQRAW ATVGLVWAAA LALGLPLLG VGRYTVQYPG  SWCFLTLAGAE SGDAFGLLF SMLGLSVGL SFLLNTVSA TLCHVYHGQE AAQQRPRDSE  VENMAQLLGI MVVASVCWLP LLVFAQTVL RNPPAMSPAG QLSRTTEKEL LIYLRVATWN  QILDPTWYIL FRAVLRLRQ PRLSTRPSL SLQPQLTQRS GLQ </p>	

449	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	(C NM_005283	atggagtcct caggcaaccc agagagcacc accctttttt actatgacct tcagagccag A ccgtgtgaga accaggcctg ggtctttgct accctcgcca ccaactgtcct, gtactgcctg gtgtttctcc taagcctagt gggcaacagc ctggtcctgt gggcctctgt gaagtatgag agcctggagt ccttcaccaa catcttcac ctcaacctgt gccctcaga cctgggttcc gcctgcttgt tgcctgtgtg gatctcccca taccactggg gctgggtgct gggagacttc ctctgcaaac tctcaatat gatcttctcc atcagcctct acagcagcat ctcttctcctg accatcatga ccatccaccg ctacctgtcg gtagttagcc cccctctccac cctgcgcgtc cccaccctcc gctgccgggt gctggtgacc atggctgtgt gggtagccag caccctgtcc tccatctctcg acaccatctt ccacaagggt ctttctctcg gctgtgatta ttccgaactc acgtggtaac tcaactccgt ctaccagcac aacctcttct tctgctgtc cctggggatt atcctgttct gctacgtgga gatcctcagg accctgttcc gctcagctc caagcgcgc caccgcacgg tcaagctcat cttcgccatc gtggtggcct acttctcag ctggggctcc tacaactca cctgttttct gcagacgtg ttccggacc agatcatccg gagctgcgag gccaaacagc agctagaata cgcctgtct atctgccga accctgcctt ctccactgc tgctttaacc cgtgctctta tgtcttctgt ggggtcaagt tccgacaca cctgaacat gttctccggc agttctgtgt ctgccggctg caggcaccca gccagcctc gatccccac tcccttggtg ccttcgccta tgaggcgcc tcttctact ga 450	98519	Chemokine (C NP_005274.1 motif) XC Receptor 1 (CCXCR1)	(C NP_005274.1 motif) XC Receptor 1 (CCXCR1)	MESSGNPEST TFFYYDLQSQ PCENQAWFA TLATTVLYCL VFLLSLVGNS LVLWLVKYE P SLESITNIFI LNLCLSDLVF ACLLPWISIP YHWGWLVDG LCKLLNMIFS ISLYSSIFFL TIMTIHRYLS VVSPISLRLV PTLRCRVLVT MAVWVASILS SILDTIFHKV LSSGCDYSEL TWYLTSVYQH NLFFLLSLGI ILFCYVEILR TLFRRSRKRR HRTVKLIFAI WYFVLSWGP YNFTLFLOTL FRTQIIRSC AKQOLEYALL ICRNLAFSHC CFNPVLYVEV GVKFRTLKH VLRQWFRCRL QAPSPASIPH SPGAFAYEGA SFY 451	130108	G Protein- Coupled Receptor GPR75	(NM_006794	gcgatggcga tgaatcctct agtcctgcat catccagagc ggcaggcgag ctgggggtccg A gactgcgaga tggaggagg ggcgcgtcg gcaccggca ggcctatctg tcttgggcct ctttgtcac atattgctca tctgtgagct gaggcctga ctcactgagt attttgggg agcagaagaa ggagacattt ctctccgaaa atgaactcaa caggccacct tcaggatgcc cccaatgcca cctcgtctca tgtgcctcac tcacaggaag gaaacagcac ctctctccag gagggtcttc aggatctcat ccacacagcc accttgggtga cctgtacttt tctactggcg gtcatcttct gccctgggttc ctatggcaac ttcatgtct tcttgcctt ctctgatcca gccttcagga aattcagaac caactttgat ttcatgatcc tgaacctgtc ctctgtgac ctcttcattt gtggagtgtg agcccccatg ttacaccttg tgttatctt cagctcagcc agtatgatcc cggatgcttt ctgcttcaat ttccatctca ccagttcagg ttcatcatc atgtctctga agacagtggc agtgatcgcc ctgcaccggc tccggatggt gttggggaaa cagcctaata gcacggcctc ctttccctgc accgtactcc tcaacctgct tctctgggcc accagtttca ccttggccac cttggctacc ttgaaaacca gcaagtccca cctctgtctt cccatgtcca gtctgattgc tggaaaaagg aaagccattt tgtctctcta tgggtcgac ttcaccttct gtgtgtgtgt ggtctctgtc tcttatcatca tgattgtca gacctgcg aagaacgctc aagtcagaaa gtgccccctt gtaatacacag tcatgtctc cagaccacag cctttcatgg ggtccctgt gcaggagggt ggagatccca tccagtgtgc catgccgct ctgtatagga accagaatta caacaaactg cagcacgttc agaccgttg atataccaag
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Homo  
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452	130108	G Protein- Coupled Receptor GPR75	NP_006785.1	<p>           agtccaacc aactgggtcac cctgcagca agcgactcc agctcgtatc agccatcaac            ctctccactg ccaaggattc caaagccgtg gtcacctgtg tgatcattgt gctgtcagtc            ctggtgtgct gtctccact ggggatttcc ttggtacagg tggttctctc cagcaatggg            agcttcattc ttaccagtt tgaattgttt ggattactc ttatatcttc caagtcagga            ttaaaccttt ttatatattc tcggaacagt gcagggctga gaaggaaagt gctctgggtg            ctccaataca taggcctggg tttttctgc tgaacaaca agactcgact tcgagccatg            ggaagaaggga acctgaagt caacagaaac aaatctctcc atcatgaaac aaactctgcc            tacatgttat ctccaaagcc acagaagaaa ttgttgacc aggcctgttg cccaagtcat            tcaaaagaaa gtatgtgtgag tcccaagatc ttgctggac atcaacactg tggtcagagc            agctcgaccc ccatacaac tcggattgaa ccttactaca gcattctata cagcagccct            tcccaggagg agagcagccc atgtaactta cagccagtaa actcttttgg atttgccaat            tcatatatgg ccatgcatta tcacaccact aatgacttag tgcaggaata tgacagcact            tcagccaagc agattccagt cccctccgtt taaagtcagt gaggtatag gatcttatgt            aaacagtttt tgtttctgat agtaattggac ttattcttaa ctgagatca gtggcggatc            aaaacctaca agattcaact gaaaagtgg cagttatggt ttctcttcat ctgatgtgtc            agtatctgtt gatttgcttt gtagtttgtt gacatcttaa gatttgatgt gaaagtttta            gattttttac cctg         </p>	Homo sapiens
453	133117	G Protein- Coupled Receptor RAIG1	NM_003979	<p>           FIVEISFFDP AFRKFRNFD FMILNLSFCD LFICGVTPM FTFVLFSSA SSIPDAFCFT            FHLTSSGFII MSLKTAVIA LHRLRMVLGK QNRTASFPC TVLLTLLLWA TSFTLATIAT            LKTSKSHLCL PMSLIAGKG KAILSLYVD FTFCAVWSV SYIMIAQTLR KNAQVRKCPP            VITVDASRPQ PFMGVPVQGG GDPIQCAMPA LYRNQYNKL QHVQTRGYTK SPNQLVTPAA            SRLQLVSAIN LSTAKDSKAV VTCVIIIVLSV LVCCPLGLIS LVQVVLSSNG SFILYQFELF            GFTLIFKSG LNPFIYSRNS AGLRRKVLWC LQYIGLGFCC CKQKRLRAM GKNLEVNRN            KSSHETNSA YMLSPKQKK FVDQACGPH SKESMVSPKI SAGHQHCQS SSTPINTRIE            PYYSIYNSSP SQEESPCNL QVNSGFAN SYIAMHYHTT NDLVQYDST SAKQIPVPSV            ataacagcat gaagtgcgt ggaactgaa taggcgtgtc ctctccctcg accctcccc A            tcttgtccc tctgtcacc cctcgtcgt tccctccctc cggcgagggc cgcctttata            acaactgctc agatgcgag ggcgggag ctgtccaagg tctccccag cactgaggag            ctgcctgct gccctcttc gcgcgggaag cagcaccaag ttcacggcca acgccttggc            actagggtcc agaattgcta caacagtccc tgatgggtgc cgcaatggcc tgaatccaa            gtactacaga ctttgtgata aggcctgagc ttggggcatc gtccatgaaa cgggtggccac            agccggggtt gtgacctcg tggccttcat cctcactctc ccgactctcg tctgcaaggt            gcaggactcc aacaggcgaa aaatgctgcc tactactctt ctctctctc tgggtgtgtt            gggcatcttt ggcctcacct tcgccttcat catcgagactg gacggagca cagggccac            acgcttcttc ctctttgga tctcttttc catctgttc tccgtctgc tggctcatgc            tgtcagctcg accaagctcg tccgggggag gaagccctt tccctgttg tgattctggg            tctggccgtg ggcctcagcc tagtccagga tgttatcgct attgaatata ttgtcctgac            catgaatagg accaagctca atgtcttttc tgagcttcc gctcctcgtc gcaatgaaga            ctttgtcctc ctgtcacct acgtcctctt ctgtgatggc gtgaccttc tcatgtctc            cttcaccttc tgtgttctt tcacgggctg gaagagacat gggggccaca tctacctcac         </p>	Homo sapiens



454	133117 G Protein-Coupled Receptor RAIG1	NP_003970.1	gatgtctctc tccattgcca tctgggtggc ctggatcacc ctgctcatgc ttctgactt tgaccgcagg tgggatgaca ccatcctcag ctccgccttg gctgccaatg gctgggtgtt cctgttggt tatgttagtc ccgagttttg gctgctcaca aagcaacgaa accccatgga ttatcctgtt gaggatgctt tctgtaaac tcaactctg aagaagagct atggtgtgga gaacagagcc tactctcaag aggaatcac tcaaggtttt gaagagacag gggacacgct ctatgcccc tattccacac attttcagct gcagaaccag cctcccaaa aggaattctc catccacagg gccacgctt gccgagccc ttacaaagac tatgaagtaa agaaagaggg cagttaactc tgtcctgaag agtgggaaa atgcagccg gcggcagatc tagcgggagc tcaaaaggat gtggcgaaa tcttgagtct tctgagaaa ctgtacaaga cactacggga acagtttgcc tccctccag cctcaaccac aattcttcca tgcgtgggt gatgtgggt agtaagactc cagttcttag aggcgtgta gtattttttt ttttttgtct cctcctttgg atacttcttt taagtgggag tctcaggcaa ctcaagttaa gaccttact ctttttgttt gttttttgaa acaggatctt gctctgtcac ccaggcttga gtgcagtggt gcgacacag cccagtgcag cctcgaccac ctgtgctcaa gcaatcctcc catctccatc tcccaaatg ctgggatgac agcgtgagc cacagctccc agcctaggcc cttaatcttg ctgttatttt ccatggacta aaggtctggt catctgagct cagctgggt cacacagctc taggggcctg ctctctaac tcacagtgg ttttgtgagg ctctgtggcc cagagcagac ctgcatact gagcaaaaat agcaaaagcc tctctcagcc cactggcctg aatctacact ggaagccaa ttgtctggcac cccgctccc caaccttct tgcctgggta ggagaggcta aagatcacc taaatttact catctctcta gtctgcctc acattgggctc tcagcagctc cccagcacca attcacaggt caccctctc ttcttgact ttccgaaac ttgctgtcaa ttccgagatc taatctccc ctacgctctg ccaggaattc ttccagacct cactagcaca agcccggtg ctcttgtca ggagaattg tagatactc tcaactcaaa ttctggggc tgatacttct ctcatcttgc acccaacct ctgtaaatag atttaccgca ttaccggctg cattctgtaa gtgggcctg tctctaatg gaggagtgt cattgtataa taagtattc acctgagtat gcaataaaga tgtgtggcc actcttctc ggtggtggca gcaaaaaaa aaaaa	Homo sapiens
455	152198 Tachykinin Receptor 2	NM_001057	RRKMLPTQFL FLLGVIGIFG LTFAFIIGLD GSTGPTREFFL FGILFSICFS CLLAHAVSLT KLVGRKRKPLS LLVILGLAVG FSLVQDVIAI EYIVLTMRN NVNVFSELSA PRNEDFVLL LTVVLFMAL TFLMSSFTFC GSFTGWKRHG AHYILTMLLS IAIWVAWITL LMLPDFDRRW DDTILSSALA ANGWVFLAY VSPEFWLLTK QRNPMDYVPE DAFCKPQLVK KSYGVENRAY SQEEITQGE ETGDTLYAPY STHFQLQNP PQKEFSIPRA HAWPSPYKDY EVKKEGS atggggacct gtgacattgt gactgaagcc aatatctcat ctggcctga gacacacac acgggcatca cagccttctc catgcccagc tggcagctgg cactgtgggc accagctac ctggccctgg tgcgtgtggc cgtgacgggt aatgccatcg tcatctggat catcctggcc catcggagga tgcgcacagt caccaactac ttcatcgta atctggcgt ggctgacctc tgcatggctg ccttcaatgc cgccttcaac ttgtctatg ccagcccaa catctggtag ttggccctg ccttctgcta ctccagaac ctcttccca tcacagccat gttgtcagc atctactcca tgaccgcat tgcgtccgac aggtacatgg ccatcgcca cccctccag cctcggttt cagctcccag caccaaggcg gttattgtg ccatctggct ggtggctctc gccctggcct cccctcagtg cttctactcc accgtcacca tggaccaggg tgccaccaag	Homo sapiens

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456 152198 Tachykinin Receptor 2 NP\_001048.1  
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Homo  
sapiens

457 152201 Thyrotropin Receptor NM\_000369 A  
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459	152245	C-C Chemokine Receptor 2	NM_000648	<p> MRPADLLQLV LLLDLPRDLG GMGSSPCE CHQEEDFRVT CKDIQRIPLS PPSTQTLKLI P  ETHLRTIPSH AFSNLPNISR IYVSIDVTLQ QLESHSFYNL SKVTHIEIRN TRNLTYIDPD  ALKELPLLKF LGIFNTGLKM FPDLTKVYST DIFFILEITD NPYMTSIPVN AFQGLCNETL  TLKLYNNGFT SVQGYAFNGT KLDVAVLNKN KYLTVIDKDA FGGVSGPSL LDVSQTSVTA  LPSKGLEHLK ELIARNWTWL KKLPLSLSEL HLTRADLSYP SHCCAFKNQK KIRGILESML  CNESSMQSLR QRKSVNALNS PLHQEYEENL GDSIVGYKEK SKFQDTHNNA HYYVFFEEQE  DEIIGFGQEL KNPOEETLQA FDSHYDYTIC GSEDMVCTP KSDEFNPCED IMGYKFLRIV  VMFVSLALL GNVFVLLILL TSHYKLNVRP FLMCNLAFAD FCMGYLLLI ASVDLYTHSE  YYNHAIDWQT GPGCNTAGFF TVFASLSVY TLTVTITLERW YAITFAMRLD RKIRLRHACA  INVGGWVCCF LLALLPLVGI SSYAKVSIOL PMDTETPLAL AYIVFVLIN IVAFVIVCCC  HVKIYITVRN PQYNPGDKDT KIAKRMVLI FTDFICMAPI SFYALSAILN KPLITVSNK  ILLVLFYPLN SCANPLYAI FTKAFQRDVF ILLSKFGICK RQAQAYRGQR VPPKNSTDIO  VQKVTHDMRQ GLHNMEDVYE LIENSHLTPK KQGISEEYM QTVL  caggactgcc tgagacaagc cacaagctga acagagaaaag tggattgaac aaggacgcat A  ttcccagta catccacaac atgtgttcca catctcgttc tcggtttatc agaaatacca  acgagagcgg tgaagaagtc accactttt ttgattatga ttacgggtgct ccctgtcata  aattgacgt gaagcaaat ggggcccac tctgtcctcc gctctactcg ctggtgttca  tctttggttt tgtgggcaac atgtgtgtcg tctcatctt aataaactgc aaaaagctga  agtgttgac tgacatttac ctgctcaacc tggccatctc tgatctgctt ttcttatta  ctctccatt gtgggctcac tctgtgcaa atgagtggtt ctttgggaat gcaatgtgca  aattattcac agggctgtat cacatcggtt attttgggg aatcttctc atcatcctcc  tgacaatcga tagatacctg gctattgtcc atgtgtgtt tgcttataaa gccaggacgg </p>	Homo sapiens

460	152245 C-C	NP_000639.1	Chemokine Receptor 2	<p> tcaaccttgg ggtggtgaca agtgtgatca cctggttggt ggctgtgttt gcttctgtcc  caggaatcat cttactataa tgccagaaag aagattctgt ttatgtctgt ggcccttatt  ttccacgagg atggaataat ttccacacaa taatgagaa cattttgggg ctggtcctgc  cgctgctcat catggtcatc tgctactcgg gaatcctgaa aacctgctt cggtgtcgaa  acgagaagaa gaggcatagg gcagtgagag tcatcttcac catcatgatt gttactttc  tctctggac tccctataac attgtcattc tctgaacac ctccaggaa ttcttcggcc  tgagtaactg tgaagcacc agtcaactgg accaagccac gcaggtgaca gagactcttg  ggatgactca ctgctgcac aatcccatca tctatgcctt cgttggggag aagttcagaa  ggtatctctc ggtgttcttc cgaagcaca tcaccaagcg cttctgcaa caatgtccag  ttttctacag ggagacagtg gatggagtga cttaacaaa cagccttcc actggggagc  aggaagtctc ggtggttta taaacgagg agcagtttga ttgtgttta taaagggaga  taacaatctg tatataacaa caaacttcaa ggttttggttg aacaatagaa acctgtaaag  caggtgcccc ggaacctcag ggctgtgtgt actaatcac actatgtcac ccaatgcata  tccaacatgt gctcagggaa taatccagaa aaactgtggg tagagacttt gactctccag  aaagctcatc tcagctcctg aaaaatgcct cattaccttg tgctaactct ctttttctag  tcttcataat ttcttcactc aatctctgat tctgtcaatg tcttgaatc aagggccagc  tggagggtgaa gaagagaatg tgacaggcac agatgaatgg gagtgaaggga tagtggggtc  agggctgaga ggagaaggag ggagacatga gcatggctga gcctggacaa agacaaaggt  gagcaaggag ctcacgcatt cagccaggag atgatactgg tccctagccc catctgccac  gtgtatttaa ccttgaaggg ttcaccagggt caggagagat ttgggaactg caataaacctg  ggagttttgg tggagtcoga tgattctctt ttgcataagt gcatgacata tttttgctt  attacagttt atctatggca cccatgcacc ttacatttga aatctatgaa atatcatgct  ccattgttca gatgcttctt aggccacatc cccctgtcta aaaattcaga aaattttgt  ttataaaga tgcattatct atgatatgct aatatatgta tatgcaatat aaaatttag  MLVLLILNC KKLKCLTDIY LLNLAISDLL AIVHAVFALK ARTVTFGVV SVITLWAVE ASVPGIIFTK  HIGYFGGIF IILLTIDRYL AIVHAVFALK ARTVTFGVV SVITLWAVE ASVPGIIFTK  CQKEDSVVVC GPYFPRGWN FHTIMRNILG IVPPLLMVI CYSGLKTL RCRNEKKRHR  AVRVIFTIMI VYFLEWTPYN IIVLLNTFQE FFLSNCEST SOLDQATQVT ETLGMTHCCI  NPIIYAFVGE KFRRYLSVFF RKHITKRFCK QCPVFYRET DGVTSNTNTPS TGEQEVSAAGL  CAGAAATCCT CAGGTCCAC AGAAATGAAC ACGTTTCTA AAATAAAGTC AAGCCAAGCT A  GTCTTACCCC AAAGAAAATC CTAGCAAGCA AAGGTGGCTT CCTTCTGAG GCCCCAGCCA  GGTGTGTCCA ACCGTAGGAG CCACAGCTCA GAGATCAGG TGACTTAACA GTTAGAGGGC  ACTTGATGAG TAAGTGAAA TAGGGAACCC AAGTCAGAG ACACCTCCCT TCTGAGTCCC  AACCATGTCT ACATCTGGAG AAGAACAGTT AAGTCAAGG ATCACAGACT TGTGATTAGA  GACTGCCAGG GTCCATATGA CCAAGCGGG GTCCAGGTG TGAAGCTGGG GTTGAGGATC  CATTATCTGA ATTTTCCACT CTATGGATGA TCACTTTTAT TCTTTTCTT TTCTTGAATT  TATTTCCATT TGTATTATCC TAAATTCCT GGTAGATCAC CTGTGAAAGC TTGCAACTGT  CTGATAAGAA TAAAGGGGA AGGATTTGAC TTTACAGCAG AGACTTCAGA AGGAGTCTC  TCTAGGAGCA AATTGGGGG AATCCAGTGG GAAGAGGTG GAAGACTGCA CTTGAGCTGC  GTTTGGACAA CAGGCACACA ATCTTTACTT ACTTTTCAGG CTGCTTTGAG GT </p>	Homo sapiens
461	152299 Interleukin-8 Receptor A	LG5459		<p> tcaaccttgg ggtggtgaca agtgtgatca cctggttggt ggctgtgttt gcttctgtcc  caggaatcat cttactataa tgccagaaag aagattctgt ttatgtctgt ggcccttatt  ttccacgagg atggaataat ttccacacaa taatgagaa cattttgggg ctggtcctgc  cgctgctcat catggtcatc tgctactcgg gaatcctgaa aacctgctt cggtgtcgaa  acgagaagaa gaggcatagg gcagtgagag tcatcttcac catcatgatt gttactttc  tctctggac tccctataac attgtcattc tctgaacac ctccaggaa ttcttcggcc  tgagtaactg tgaagcacc agtcaactgg accaagccac gcaggtgaca gagactcttg  ggatgactca ctgctgcac aatcccatca tctatgcctt cgttggggag aagttcagaa  ggtatctctc ggtgttcttc cgaagcaca tcaccaagcg cttctgcaa caatgtccag  ttttctacag ggagacagtg gatggagtga cttaacaaa cagccttcc actggggagc  aggaagtctc ggtggttta taaacgagg agcagtttga ttgtgttta taaagggaga  taacaatctg tatataacaa caaacttcaa ggttttggttg aacaatagaa acctgtaaag  caggtgcccc ggaacctcag ggctgtgtgt actaatcac actatgtcac ccaatgcata  tccaacatgt gctcagggaa taatccagaa aaactgtggg tagagacttt gactctccag  aaagctcatc tcagctcctg aaaaatgcct cattaccttg tgctaactct ctttttctag  tcttcataat ttcttcactc aatctctgat tctgtcaatg tcttgaatc aagggccagc  tggagggtgaa gaagagaatg tgacaggcac agatgaatgg gagtgaaggga tagtggggtc  agggctgaga ggagaaggag ggagacatga gcatggctga gcctggacaa agacaaaggt  gagcaaggag ctcacgcatt cagccaggag atgatactgg tccctagccc catctgccac  gtgtatttaa ccttgaaggg ttcaccagggt caggagagat ttgggaactg caataaacctg  ggagttttgg tggagtcoga tgattctctt ttgcataagt gcatgacata tttttgctt  attacagttt atctatggca cccatgcacc ttacatttga aatctatgaa atatcatgct  ccattgttca gatgcttctt aggccacatc cccctgtcta aaaattcaga aaattttgt  ttataaaga tgcattatct atgatatgct aatatatgta tatgcaatat aaaatttag  MLVLLILNC KKLKCLTDIY LLNLAISDLL AIVHAVFALK ARTVTFGVV SVITLWAVE ASVPGIIFTK  HIGYFGGIF IILLTIDRYL AIVHAVFALK ARTVTFGVV SVITLWAVE ASVPGIIFTK  CQKEDSVVVC GPYFPRGWN FHTIMRNILG IVPPLLMVI CYSGLKTL RCRNEKKRHR  AVRVIFTIMI VYFLEWTPYN IIVLLNTFQE FFLSNCEST SOLDQATQVT ETLGMTHCCI  NPIIYAFVGE KFRRYLSVFF RKHITKRFCK QCPVFYRET DGVTSNTNTPS TGEQEVSAAGL  CAGAAATCCT CAGGTCCAC AGAAATGAAC ACGTTTCTA AAATAAAGTC AAGCCAAGCT A  GTCTTACCCC AAAGAAAATC CTAGCAAGCA AAGGTGGCTT CCTTCTGAG GCCCCAGCCA  GGTGTGTCCA ACCGTAGGAG CCACAGCTCA GAGATCAGG TGACTTAACA GTTAGAGGGC  ACTTGATGAG TAAGTGAAA TAGGGAACCC AAGTCAGAG ACACCTCCCT TCTGAGTCCC  AACCATGTCT ACATCTGGAG AAGAACAGTT AAGTCAAGG ATCACAGACT TGTGATTAGA  GACTGCCAGG GTCCATATGA CCAAGCGGG GTCCAGGTG TGAAGCTGGG GTTGAGGATC  CATTATCTGA ATTTTCCACT CTATGGATGA TCACTTTTAT TCTTTTCTT TTCTTGAATT  TATTTCCATT TGTATTATCC TAAATTCCT GGTAGATCAC CTGTGAAAGC TTGCAACTGT  CTGATAAGAA TAAAGGGGA AGGATTTGAC TTTACAGCAG AGACTTCAGA AGGAGTCTC  TCTAGGAGCA AATTGGGGG AATCCAGTGG GAAGAGGTG GAAGACTGCA CTTGAGCTGC  GTTTGGACAA CAGGCACACA ATCTTTACTT ACTTTTCAGG CTGCTTTGAG GT </p>	Homo sapiens

462 152299 Interleukin-8 Receptor A NM\_000634

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463	152299 Interleukin-8 Receptor A	NP_000625.1	acaggaatga atgcatgctg aaaagaccac tctttt MSNITDPQMW DFDDLNFTHM PPADEYSPC MLETETLNKY VVIIAYALVF LLSLLGNSLV P MLVILYSRVG RSVTDVYLIN LALADLLFAL TLPWAASKV NGWIFGTFLC KVSLLKEVN FYSGILLAC ISVDRYLAIV HATRTLQKR HLKFKVCLGC WGLSMNLSLP FFLFRQAYHP NNSSPVCYEV LGNDTAKWRM VLRILPHTFG FIVPLFVMLF CYGFTLRTLK KAHMGQKHRA MRVIEAVVLI FLLCWLPYNL VLLADTLMRT QVIOQESCRR NNIGRALDAT EILGFLHSCL NPIIYAFIQ NFRHGLKIL AMHGLVSKEF LARHRTSYT SSSNVVSSNL	Homo sapiens
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465	158822 Mas Proto-Oncogene	NP_002368.1	atgctgcccg actggaagag ctctctgac ctcttgctt acatcatcat ctctctcaat A ggcctccctg ccaacctctt ggccttgctg ggccttgctg ccagccccag cctgcacctg tgcacatcct cctgctgagc ctgacgctgg ccgacctct cctgctgctg ctgctgccc tcaagatcat cgaggctgc tgaacttcc gctggtacct gcccaaggct gtctgcccc tcacgagttt tggcttctac agcagcatct actgcagcac gtggctcctg gggggcatca gcatcgagcg ctacctggga gtggcttcc ccgtgcagta caagctctcc cgccggcctc tgtatggagt gattgcagct ctggtggcct gggttatgct ctttgggtcac tgcaccatcg tgatcatcgt tcaatacttg aacacgactg agcagggtcag aagtggcaat	Homo sapiens
466	159152 G Protein-Coupled Receptor GPR43	NM_005306		Homo sapiens

467 159152 G Protein-  
Coupled  
Receptor  
GPR43 NP\_005297.1 sapiens

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468 159973 Vasoactive  
Intestinal  
Polypeptide  
Receptor 1 NM\_004624 sapiens

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469	159973 Vasoactive Intestinal Polypeptide Receptor 1	NP_004615.2	<p>cctgcccggg cgggccagc cccggccctg ggctcggagg ctgccccgg cccctgggtc</p> <p>tctggtccgg aactcctag agaacycagc cctagagcct gcctggagcg tttctagcaa</p> <p>gtgagagaga tggagctcc tctcctggag gattgcaggt ggaactcagt cattagactc</p> <p>ctcctccaaa ggcctccac gccaatcaag ggcaaaaagt ctacatactt tcatctcgac</p> <p>tctgccccct gctggtctct ctgcccattt ggaggaaagc aaccggtgga tctcaaaaca</p> <p>acactggtgt gacctgagg cagaaaggtt ctgcccgggg aaggtcacca gcaccaaacac</p> <p>cacggtagtg cctgaaaattt caccattgct gtcaagttcc ttggggttaa gcattaccac</p> <p>tcaggcattt gactgaagat gcagctcact accctattct ctctttacgc ttagttatca</p> <p>gctttttaa gtgggttatt ctggagtttt tgtttgaga gcacacctat cttagtggtt</p> <p>ccccaccgaa gtggactggc cctgggttca gctggtggg aggacggtgc aaccaagga</p> <p>ctgaggact ctgaagcctc tgggaaatga gaaggcagcc accagcgaat gctaggtctc</p> <p>ggactaagcc tacctgctct ccaagtctca gtggttcat ctgtcaagtg ggatctgtca</p> <p>caccagccat acttatctct ctgtgctgtg gaagcaacag gaatcaagag ctgcccctct</p> <p>tgtccacca cctatgtgcc aactgttgta actaggtcga gagatgtgca cccatgggct</p> <p>ctgacagaaa gcagatacct caccctgcta cacatacagg atttgaactc agatctgtct</p> <p>gataggaatg tgaagcacg gactcttact gctaactttt gtgtatcgt accagccaga</p> <p>tctcttggt tatttggtta ccacttgat tattaatgcc attatcctga attccccctg</p> <p>ccaccacc cctcctggcg tgtggctgag gaggcctcca tctcatgtat catctggata</p> <p>ggagcctgct ggtcacagcc tctctgtct gccttcacc ccagtggcca ctcagcttcc</p> <p>taccacacc tctgccagaa gatccccca ggactgcaac aggttctgtc aacaataat</p> <p>gtggcttgg a</p>	Homo sapiens
470	160040 Vasoactive Intestinal Polypeptide Receptor 2	NM_003382	<p>cgggacgagg gggcgcccc cgcgctcggc gcgctcggct acagctgcgg ggcccagggt A</p> <p>ctccgcgcac tcgctcccg cccatgctgg aggcggcgga accgggggga cctaggacgg</p> <p>agggcgcggg cgctggcggg cccccggcac gctgagctcg ggatgcggac gctgctgct</p> <p>cccgcgctgc tgactgctg gctgctcgg cccgtgaaca gcattcaccc agaatgccga</p> <p>tttcatctgg aaatacagga ggaagaaaca aaatgtacag agcttctgag gtctcaaaaca</p> <p>gaaaaacaca aagcctgcag tggcgtctgg gacaacatca cgtgctggcg gcctgccaat</p> <p>gtgggagaga cgtcacggt gccctgccc aaagtcttca gcaattttta cagcaaaagca</p> <p>gaaacataa gcaaaaactg tacgagtgc ggatggtcag agacttctcc agattctgc</p> <p>gatgcctgtg gctacagcga cccggaggat gagagcaaga tcacgtttta tattctggtg</p> <p>aaggccattt atacctggg ctacagtgtc tctctgatgt ctctgcaac aggaagcata</p> <p>attctgtgcc tcttcaggaa gctgcactgc accaggaatt acatcacct gaacctgtc</p> <p>ctgtccttca tctgagagc catctcagtg ctggtcaagg acgactgtct ctactccagc</p>	Homo sapiens



471	160040 Vasoactive Intestinal Polypeptide Receptor 2	NP_003373.1	<p> tctggcacgt tgcactgccc tgaccagcca tctctctggg tgggctgcaa gctgagcctg  gtcttctctgc agtactgcat catggccaac ttcttctggc tgctgtgga ggggtctac  ctccacaccc tctgtgtggc catgtctccc cctagaaggt gcttctggc ctacctctg  atcgatggg gctctccac cgtctgcac ggtgcatgga ctgctggcag gctctactta  gaagacaccc gttgtgga tacaacgac cacagtgtgc cctgtgggt catacgaata  ccgattttaa ttctcatcat cgtcaatttt gtcttttca ttagtattat acgaattttg  ctgcagaagt taacatcccc agatgtcggc ggcaacgacc agtctcagta caagaggctg  gccaagtcca cgtctctgct tatcccgctg ttccggctcc actacatggt gtttgcctg  tttcccatca gcatctctc tctctactgt cctctactgt ttcttgaaca gtgagtgga  caggccctgg tgggtggcgt gtgcccagc cgtctcgcga gccgggatta cagggtctgc  aagcgaataa ggcgaagccg gtgcccagc cgtctcgcga gccgggatta cagggtctgc  ggttctctct tctccacaa cggctcggag ggcgcccgc agttccaccg cgcgtcccg  gcccagtcct tctgcaaac ggagacctcg gtcatctagc cccacctcg cctgtcggac  gcggcgggag gccacgggt cgggcttct gcgggctga gacgcgggt tctctcttc  agatgccga gcacgtgtc gggcaggta gcggtgctc gactccgtca agctggtgtg  ccactaaacc ccatacctgg </p>	<p> LLRSQTEKHK ACSGWDNIT P  TFPDEFVACG YSDPEDESKI  IHLNLFSLFI LRAISVLVKD  LVEGLYLHTL LVAMLPPRR  WWVIRIPILI SIIVNFVLF  YMFVAVFPIS ISSKYQILFE  RDYRVCSSSF SHNGSEGLQ </p>	Homo sapiens
472	160055 Motilin Receptor (GPR38)	NM_001507	<p> atgggcagcc cctggaacgg cagcgacggc cccgaggggg cgcgtggccc A  gcgctgcgc cttggacga cgcgcgtgc tgcccttct cctgggggc gctggtgcg  gtgaccgctg tgtgctgtg cctgttctg ctcgggggtga gcggaacgt ggtgaccgtg  atgctgatcg ggcgtaccg ggacatgagg accaccacca acttgacct gggcagcatg  gccgtgtccg acctactcat cctgctcgg ctcgcgttctg acctgtaccg cctctggcg  tcgcgccct ggtgttctg gccgtgctc tgccgctgt cctctacgt gggcagaggc  tgacactacg ccacgtgct gcacatgacc cgcgtcagcg tcgagccta cctggccatc  tgccgcccgc tccgcccgc cgtcttggt acccgccgc cgtctcagc gctcatcgt  gtgctctgg cgtggcgct gctctctgc ggtcccttct tgttctggt gggcgtcag  caggacccc gcatctcgt agtcccggc ctaaatgga cgcgcggat cgcctcctg  cctctcgtc cgtcgcgc cctctggctc tgccgggccc caccgcgtc cccgcccgtg  gggcccaga cgcggaggc cgcggcgctg ttcagcccg aatgcggcc gagccccg  cagctggcg cgtcgtgt catgctgtg gtcaccacc cctacttct cctgcccctt  ctgtgcctca gcatctcta cgggctcgc gggcgaggc tgtggagcag ccggcgccg  ctgcgagcc cgcgcgcctc gggcgggag agagccacc ggcagaccgt ccgcgtcctg  ctggtggtg tctggcatt tataattgc tgggtgctc tccacgttg cagaatcatt  tacataaaca cggaaattc gcgatgatg tacttctc agtactttaa catcgtcgt </p>	<p> atgggcagcc cccgaggggg cgcgtggccc A  tgcccttct cctgggggc gctggtgcg  gctggaacgt ggtgaccgtg  ggcagcatg  acctgtaccg cctctggcg  tgccgctgt cctctacgt gggcagaggc  tgccgctgt cgcgtcagc tcgagccta cctggccatc  tgccgcccgc cgtcttggt acccgccgc cgtctcagc gctcatcgt  gtgctctgg cgtggcgct gctctctgc ggtcccttct tgttctggt gggcgtcag  caggacccc gcatctcgt agtcccggc ctaaatgga cgcgcggat cgcctcctg  cctctcgtc cgtcgcgc cctctggctc tgccgggccc caccgcgtc cccgcccgtg  gggcccaga cgcggaggc cgcggcgctg ttcagcccg aatgcggcc gagccccg  cagctggcg cgtcgtgt catgctgtg gtcaccacc cctacttct cctgcccctt  ctgtgcctca gcatctcta cgggctcgc gggcgaggc tgtggagcag ccggcgccg  ctgcgagcc cgcgcgcctc gggcgggag agagccacc ggcagaccgt ccgcgtcctg  ctggtggtg tctggcatt tataattgc tgggtgctc tccacgttg cagaatcatt  tacataaaca cggaaattc gcgatgatg tacttctc agtactttaa catcgtcgt </p>	Homo sapiens

473	160055	Motilin Receptor (GPR38)	NP_001498.1	ctgcaacttt tctatctgag cgcattctatc aaccaatcc tctacaacct catttcaaag aagtacagag cggcgccctt taaactgctg ctgcaagga agtccaggcc gagaggcttc cacagaagca gggacactgc ggggaagtt gcaggggaca ctggaggaga cacggtgggc tacacgaga caagcgctaa cgtgaagacg atgggataa MLIGRYRDMR TTTNLYLGM AVSDLLILG LPFDLYRLMR SRPWVFGPLL CRISLYVGE CTYATLLHMT ALSVERYLAI CRPLRARVLV TRRRVRALIA VLMAVALLSA GPFLELVGE QDPGISVVPG INGTARIASS PLASSPPLWL SRAPPSPPS GPETAEEAAL FSRECRPSA QLGALRWMLW VTTAYFFLPF LCLSLYGLI GRELWSSRRP LRGPAAASGRE RGHRTQVRVL LVVLAFLIIC WLPFHVGRII YINTEDSRMM YFSQYFNIVA LQLFYLSASI NPILYNLISK KYRAAFAKLL LARKSRPRGF HRSRDTAGEV AGDTGGDTVG YTETSANVKT MG atggactgc ccccgagct ctcttcggc ctctatgtg cgcctttgc gctggcttc A cgcctcaacg tcttgccat cggaggcgcg acggccacg cccgctccg tctacccct agctgggtct acgcccga cctgggctgc tccgacctgc tctgacagt ctctctgccc ctgaaggcgg tggaggcgt agctccggg gctggcctc tgcggcctc gctgtgcccc gtcttcgagg tggccactt cttccactc tatcgggcg gggcttctt ggcgcctg agtgcaggcc gctacctgg agcagcttc ccttgggctt accaagcctt cggaggcgg tgctattcct tgggggtgtg cggggccatc tgggcccctg tctgtgtca cctgggtctg gtctttgggt tggaggctcc agaggctgg ctggaccaca gcaacacctc cctgggcatc aacacaccgg tcaacggctc tccggctgc ctggaggcct gggaccggc cctgcccggc cgggcccgtc tcagcctctc tctcctgctc tttttctgc ccttgccat cacagcctc tgctacgtgg gctgcctccg ggcactggc cgtccggcc ctacgctgc aggaagctg cgggcccctt ggggtggcgg cggggccctc ctacgctgc tgcctgctg aggacctac aacgcctcca acgtggccag cttcctgtac cccaatctag gaggtcctg gcggaagctg gggtcatca cgggtgcctg gagtgtgtg cttaatccg tggtagccg ttacttgga agggtcctg gcctgaagac agtgtgtgc gcaagaacg aagggggcaa gtcccagaag taa	Homo sapiens
474	160059	G Protein- coupled Receptor GPR40	NM_005303	atggactgc ccccgagct ctcttcggc ctctatgtg cgcctttgc gctggcttc A cgcctcaacg tcttgccat cggaggcgcg acggccacg cccgctccg tctacccct agctgggtct acgcccga cctgggctgc tccgacctgc tctgacagt ctctctgccc ctgaaggcgg tggaggcgt agctccggg gctggcctc tgcggcctc gctgtgcccc gtcttcgagg tggccactt cttccactc tatcgggcg gggcttctt ggcgcctg agtgcaggcc gctacctgg agcagcttc ccttgggctt accaagcctt cggaggcgg tgctattcct tgggggtgtg cggggccatc tgggcccctg tctgtgtca cctgggtctg gtctttgggt tggaggctcc agaggctgg ctggaccaca gcaacacctc cctgggcatc aacacaccgg tcaacggctc tccggctgc ctggaggcct gggaccggc cctgcccggc cgggcccgtc tcagcctctc tctcctgctc tttttctgc ccttgccat cacagcctc tgctacgtgg gctgcctccg ggcactggc cgtccggcc ctacgctgc aggaagctg cgggcccctt ggggtggcgg cggggccctc ctacgctgc tgcctgctg aggacctac aacgcctcca acgtggccag cttcctgtac cccaatctag gaggtcctg gcggaagctg gggtcatca cgggtgcctg gagtgtgtg cttaatccg tggtagccg ttacttgga agggtcctg gcctgaagac agtgtgtgc gcaagaacg aagggggcaa gtcccagaag taa	Homo sapiens
475	160059	G Protein- coupled Receptor GPR40	NP_005294.1	MDLPPQLSFG LYVAAFALGF PLNLVLAIRGA TAHARLRLTP SLVYALNLGC SDLLLTVSLP P LKAVEALASG AWPLPASLCP VFVAHFFPL YAGGFALAAL SAGRYLGAFF PLGYQAFRRP CYSWGVCAAI WALVLCGLGL VEGLEAPGGW LDHSNTSLGI NTPVNGSPVC LEAWDPASAG PARFSLSLLL FFLPLAITAF CYVGCRLALA RSLTHRRKL RAAWVAGGAL LTLLLCVGPY NASNVASFLY PNLGGSWRKL GLITAWSVV LNPLVTGYLG RGPGLKTVCA ARTQGGKSQK atgcacaccg tggctacgtc cggaccacac ggtcctctgg gggcaccggc caacgcctcc A ggctgcccgg gctgtggcgc caacgcctcg gacggccacg tcccttcgcg gcgggcccgtg gacgctggc tctgtgcccgt cttcttcgcg gctgtgatgc tgcgtggcct ggtggggaac tcgctgggtca tctacgtcat ctgccgccac aagccgatgc ggaccgtgac caacttctac atcgccaaac tggcgggccac ggacgtgacc ttcctcctgt gctgcgtccc cttcacggcc ctgctgtacc cgtgcccgg ctgggtgctg ggcgacttca tctgcaagt cgtcaactac atccagcagg tctcgggtga gcccacgtgt gccactctga ccgccatgag tctggaccgc tggtagctga cgggtgtccc gttgcgcgc cttgaccgcc gcacgccccg cctggcgtg gctgtcagcc tcagcatctg gtaggctct gctgcgggtg ctgcgcgggt gctgcgccctg	Homo sapiens
476	160189	G Protein- Coupled Receptor GPR54	NM_032551	atgcacaccg tggctacgtc cggaccacac ggtcctctgg gggcaccggc caacgcctcc A ggctgcccgg gctgtggcgc caacgcctcg gacggccacg tcccttcgcg gcgggcccgtg gacgctggc tctgtgcccgt cttcttcgcg gctgtgatgc tgcgtggcct ggtggggaac tcgctgggtca tctacgtcat ctgccgccac aagccgatgc ggaccgtgac caacttctac atcgccaaac tggcgggccac ggacgtgacc ttcctcctgt gctgcgtccc cttcacggcc ctgctgtacc cgtgcccgg ctgggtgctg ggcgacttca tctgcaagt cgtcaactac atccagcagg tctcgggtga gcccacgtgt gccactctga ccgccatgag tctggaccgc tggtagctga cgggtgtccc gttgcgcgc cttgaccgcc gcacgccccg cctggcgtg gctgtcagcc tcagcatctg gtaggctct gctgcgggtg ctgcgcgggt gctgcgccctg	Homo sapiens

338/448

Homo  
sapiens

NP\_115940.1

160189 G Protein-  
Coupled  
Receptor  
GPR54

477

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gtctcgccg tggtggcggc cgtgctcctg ctcttcgccc cctgctgggg ccccatccag  
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gcgcgcgcc gccccgcgg cccccgcgg cccggacctt cggacccccg agccccacac  
gcggagctgc accgcctggg gtccccccc gccccgccca gggcgagaa gccaggggagc  
agtgggctgg ccgcgcggc gctgtcgctc ctgggggagg acaacgcccc tctctga

Homo  
sapiens

LG6564

160202 Adrenomedull  
in Receptor  
(ADMR)

478

SLVIYVICRH KPMRTVTNFI IANLAATDVT FLICCVFPTA LLYPLPGWVL GDFMCKFVNY  
IQQVSVQATC ATLTAMSVDR WYTVFPLRA LHRTPRLAL AVSLSIWVGS AAVSAPVLAL  
HRLSPGPRAY CSEAFPSRAL ERAFALYNLL ALYLLPLLAT CACYAAMLRH LGRVAVRPAP  
ADSALQGVQL AERAGAVRAK VRLVAWVWL LFAACWGPQ LFLVLQALGP AGSWHPRSYA  
AYALKTWAHC MSYSNSALNP LLYAFLGSHF RQAFRRVRPC APRRRRPRR PGPSDPAAPH  
AELHRLGSHP APARAQKPGS SGLAARGLCV LGEDNAPL  
CCGGCGCCAC GTGCCCTGCTG CTGCGCGCCT ACGTGACGGC GCATTGTCTAT GCACGTGGTG A  
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AACC CGCCAC CCTGCAGCCA AGCCTGAGCT TTCAGGCACA CCATTGCTC GCAAAGACTT  
GCGCCATGTG TCCCACTCAG TGCTCTACAC CCAGCTGAGG T

Homo  
sapiens

NM\_007264

160202 Adrenomedull  
in Receptor  
(ADMR)

479

cagcctctc acagctcccc atagcctgga cctgccggcc ctccctccag gaccgagggg A  
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480	160202 Adrenomedullin NP_009195.1 in Receptor (ADMR)	gtgctggctg ccctatcatg tgacctgct gctgctcaca ctgcatggga cccacatctc cctccactgc cacctggctc acctgctcta ctcttcttat gatgtcattg actgcttctc catgctgcac tgtgtcatca acccactcct tcaaaccttt ctacagccac acttccgggg ccggctcctg aatgctgtag tccattacct tccaaaggac cagaccaagg cgggcacatg cgctcctct tctcctctgt ccaccagca tcccatcatc atcaccaagg gtgatagcca gctgctgca gcagccccc accctgagcc aagcctgagc tttcaggcac accatttgc tccaaatact tccccactc ctccactca gctcttaca cccagctgag gta	Homo sapiens
		LAMFVGLVE NLLVICVNR GSGRAGLMNL YILNMAIDL GIVLSLPVWM LEVLDYTWL WGSFSCRFTY YFYFVNMYS IFFLVCLSD RYVTLTSASP SWQRYQHRVR RAMCAGIWL SAIILPEV HIQLVEGPEP MCLEMAPFET YSTWALAVALL STTILGFLP FPLITVFNVL TACRLRQPGQ PKRRRHCLLL CAYVAVFVMC WLPYHVTLILL LTLHGTHISL HCHLVHLLYF FYDVIDCFSM LHCVINPILY NFLSPHFRGR LLNAVWHYLP KDQTKAGTCA SSSCSTQHS IIITKGDSP AAAAPHEPS LSFQAHLLP NTSPISPTQP LTPS	
481	160204 G Protein- Coupled Receptor RTA	atgcgggttc tgcttccaaa gccatctctt ccagcaggag agggctctac tctgagctcc A tattttccaa gctccgggc cgcgctggc gctggcctgc tgccecgcg ggtccgccc ccggaggcgg gactcacagg aagagccctc cacaagagg ggcctcgcg gatcaggaca gctgcagggt ggtgtgcaga ctggtgagct gccagcagg gccagacgc gccaggcctg gagatggctg gaaactgctc ctgggaggct catcccggca acaggaacag gatgtgccct ggcctgagcg agggcccgga actctacagc cggggcttcc tgaccatga gcagatcgcg atgctgcgc ctcgggcccgt catgaactac atcttctctc tctctgcct gtgtggcctg gtgggcaacg ggtggtcct ctggttttcc ggcttctcca tcaagaggaa ccccttctcc atctacttcc tgcacctggc cagcgccgat gtgggctacc tcttcagcaa ggcggtgttc tccatcctga acacgggggg ctctcctgac gcttctggc actacatcc cagcgtgtgc cgggtcctgg ggtctctgcat gttccttacc ggcgtgagcc tctgcggcg cgtcagcgcc gagcgtcg cctcgggtcat ctcccccgc gctgtgggtc tggtaactgg cgcggcgcc caagcgccg tcggccgtgg tgtgcgccct cgcgggggg ccggcgcg cctgcaggca catggacatc tacttctgcg tgttcttggg cctgctctgt cgtctctcca tctacttag gatcgactgg ttcctgggca tctcctgtt cctgctctgc tgcctgctca tgggtgctgc ctgcctggcc ctcctcctgc acgtggagt cggggcccg cgtctgcca gctctgcca gctcaaccac gtcctcctgg ccatggtctc cgtctctctg gtgtcctcca tctacttag gatcgactgg ttcctcttct ggtcttcca gatccgggc ccttccccc agtacgtcac tgacctgtgc atctgcatca acagcagcgc caagccatc gtctacttcc tggccgggag ggacaagtgc cagcggctgt gggagccgct cagggtggtc ttccagcgg cctgcggga cggcgtgag ctgggggagg ccggggggcag cagcccaac acagtacca tggagatga gtgtccccc gggaacgcct cctgagactc cagccttg agagggcagg ggcaggaagc ggcctccaag accttctgccc ttgggacagg aatgggacc tgcctctgag tccatagagg agaagaaaga tctgttttct ctcctcggc ctccttctcc ctgggctggg gactccagg gtggctggga gactgggag ccaccagcaa acagacctgt ggccttgc cggctcccc acctattctg ctccccctaga gacctctgt acagaagtgt ccccgagggt gtggggcccc tcttgccct aggctggttg gtaaaagaga ggaggtcaac accagccta gccacctctg cctcttggt	Homo sapiens

482	160204 G Protein-Coupled Receptor RTA	CAC39840.1	<p> cagccctct tgaactgtgc ccagccagca ccagccagc agcctcatcc ctgccattca  gggctgttcc agagattcga tcctcttaag gcattatcag tgagcaaatg tgaaggaaat  ggtgtctgga agaaagtctt ggtcacatg ccttgtagct aagtctttct gaaacaacc  tcccttcccc ccgtgagtc atttggtgac tttgggtgag ggattttctg ttagtcaag  gctctggaga caggaaggcc ctttgccgc ctggtgtagt tgacctgct tttctgactc  cgggacgagc cagtcctagg ctgctccgc gagcactga ggtatccgc aggccatgag  gacccactgg gcagctctg gacagctct tggctccag cccaccga agtggacac  tggctccgcc ctggccacct ggggactgg actgtggtg acagtggcc aatgtggcca  acggaagttt tataaagac aaatgtata tcaataaaca tttataact tgc  MAGNCSWEAH PGNRNMCPG LSEAPELYSR GFLTIEQIAM LPPAVMVI FLLCLCLV P  GNGLVWFFG FSIKRNPFSI YFLHLASADV GYLFSKAVFS ILNTGGFLGT FADYIRSVCR  VLGLCMFLTG VSLLPVSAE RCASVIFPAW YWRRPKRLS AVVCALLWVL SLLVTCILNY  FCVELGRGAP GAACRHMDIF LGILLFLCC PLMVLPCIAL ILHVECRARR RQSAKLNHV  ILAMVSVFLV SSIYLGIDWF LFVVFQIPAP FPEYVTDLCI CINSSAKPIV YFLAGRDKSQ  RLWEPLRVWF QRALRDGAEL GEAGGSTPNT VTMEMQCPPG NAS </p>	Homo sapiens
483	160206 G Protein-Coupled Receptor GPR32	NM_001506	<p> atgaatgggg tctcgaggg gaccagagg tcagtgaca ggcaacctgg ggtcctgaca A  cgtgatcgct cttgttcag gaagatgaac tcttcggat gcctgtctga ggaggtgggg  tcctccgcc cactgactgt ggtatcctg tctgcgtcca ttgtcgtcgg agtctgggc  aatgggctgg tgctgtgat gactgtctc cgtatggcac gcacggctc caccgtctgc  ttctccacc tggcccttc cgtattcatg ctctcactgt ctctgceat tgccatgtac  tatattgtct ccaggcagt gctcctcga ggtgggctt gcaactcta catcacctt  gtgttctca gctacttgc cagtaactgc ctcttctct tcatctctgt ggaccgttgc  atctctgtcc tctaccctg ctgggccctg aaccaccga ctgtgcagc ggcagctgg  ctggcccttg ggtgtggt cctggccgc ccttctgtct ctgcgacct gaaattccgg  acaaccagaa aatgggaatgg ctgtacgac tctacttgg cgttcaactc tgacaatgag  actgcccaga ttgggattga aggggtcgtg gaggacaca ttataggac cattggccac  ttctgtctgg gcttctctgg gcccttagca atcataggca cctgcgcca cctcatccgg  gccaagctct tgcgggaggg ctgggtccat gccaaccgc ccaagaggt gctgctggtg  ctggtgagcg ctttcttat cttctggtc ccgttaacg tgggtctgtt ggtccatctg  tggcgacggg tgatgctcaa ggaatctac cccccgga tgcgtctcat cctccaggct  agcttgcct tgggctgtt caacagcagc ccaacccct tcctctacgt cttcgttggc  agagatttcc aagaaaagt tttccagtct tgacttctg cctggcgag ggcgtttgga  gaggaggagt ttctgtcat ctgtccctg ggaacgccc cccgggaatg a  MNGVSEGTG CSDRQPGVLT RDRCSRKN SSGCLSEEVG SLRPLTVIL SASIWWGLV P  NGLVLMWTF RMARTVSTVC FFHLALDEF LSLPLIAM YIVSRQWLLG EWACKLYITF  VFLSYFASNC LLVFISVDRCL ISVLYPVWAL NHRIVQASW LAFGVWLLAA ALCSAHLKFR  TTRKWNCTH CYLAFNSDNE TAQIWIEGV EGHIGTIGH FLGLFLGPLA IIGTCAHLIR  AKLLREGVH ANRPKRLLV LVSAFFIWS PFNVVLLVHL WRRVMLKEIY HPRMLLILQA  SFALGCVNS LNPFLYFVG RDFQKFFQS LTSALARAFG EEEFLSSCPR GNAPRE  cagctccct cctccacct tgtctgccg ctgctcttg ttagctgt gtcaggagt A  gactgctcc agggctggaa tctgtgtc cctctgtg ccagagccca cgatgtcggc </p>	Homo sapiens
484	160206 G Protein-Coupled Receptor GPR32	NP_001497.1		Homo sapiens
485	160210 G Protein-Coupled	NM_004778		Homo sapiens

Receptor  
GPR44  
(CRTH2)

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486	160210 G Protein- Coupled Receptor GPR44 (CRTH2)	NP_004769.1	<p>tttctgccac caaaggccag ggtcactgaa ggcctggccc acagcaggtg ctgagcaaaag  ggaacagtga ggtgccagc tagctgcaga gccaccctgt gttgacacct cgccccctgt  ccctcccatc cctccccct ttactcatag cacttcccc attggacacg tggcgcattt  tgcttgttta ttatgttttc tctccatcag aatgaaagct cctcgagggc agggactttg  gtctattgtc tgtatttgcc ggtgcctagg attgtgcctg tatgcaacag gactcaata  aatatttttg ctgtagactg g</p> <p>MSANATLKPL CPLEQMSRL QSHSNTSIRY IDHAAVLLHG LASLLGLVEN GVILFVVGCR P  MRQTVVTTWV LHLALSDLLA SASLPFFTYF LAVGHSWELG TTFCKLHSSI FFLNMFASGE  LJLSAISLDR LQVVRPWAQ NHRTVAAAHK VCLVLWALAV LNTVPYFVFR DTISRLDGR  MCYNNVLLN PGPRDATCN SRQAALAVSK FLAFLVPLA IIAASHAAVS LRLQHRGRRR  PGRFVRLVAA VVAFAFALCWG PYHVFSLLA RAHANPGLRP LVWRGLPFVT SLAFFNSVAN  PVLYVLTCPD MLRLRRSLR TVLESVLVDD SELGGAGSSR RRRTSSTARS ASPLALCSRP  EPRGPARLL GWLLGSCAAS PQTGPLNRAL SSTSS</p>	Homo sapiens
487	160212 G Protein- Coupled Receptor GPR52	NM_005684	<p>atgaatgaat ccaggtggac tgaatggagg atcctgaaca tgagcagtggt cattgtgaat A  gcgtccgagc gtcactcctg cccacttgga ttgggccact acagtgtggt ggatgtctgc  atcttcgaga cagtggttat tgtgttgctg acatttctga ttattgctgg gaactaaca  gttatctttg cctttcattg tgctccactg ttacatcatt atactaccag ctatttcatt  cagacgatgg catatgctga tcttttcgtt ggagttagct gcttggttcc tactctgtca  cttctccact actccacagg tgtccacgag tctattaact gccgggtttt tggatataatc  atctcagttc taaaaagtgt ttctatggca tgtcttgctt gcacagtggt ggatcgttat  cttgcaataa ccaagcctct tctctacaat caactgggtca ccccttgctg cttagagaatt  tgcatatttt tgatctggat ctactcctgc ctaattttct tgccctcctt ttttggtctg  gggaaacctg gttaccatgg tgacattttt gaatgggtgt ccacgtcttg gctcaccagt  gcctattttta ctggctttat tgtttgctta ctttatgctc ctgtgcctt tgttgctgc  ttcacctact tccacatttt caaaatttgc cgtcagcaca ccaaagagat aatgaccga  agagcccgat tccctagtc tgcagtagat tcttccagag agactggaca cagccctgac  cgtcgctacg ccattggttt gtttaggata accagtgtat tttatatgct tgggtcccc  tatataattt actttcttct agaaagctcc cgggtcttgg acaatccaac tctgtccttc  ttaacaaact ggcttgtagt aagtaaatgt ttttgtaact gtgtaataa cagcctctcc  aacggcgttt tccggctagg cctccgaaga ctggttgaga caatgtgcac atcctgtatg  tgtgtgaagg atcaggaagc acaagaacc aaacctagga aacgggctaa ttcttgctcc  attga</p> <p>ILNMSSGIWN ASERHSCPLG FGHYSWVDVC IFETVVIVLL TFLIIAGNLT P  VIFAFHCAPL LHYYTTSYFI QTMAYADLFV GVSLVPTLS LLHYSTGVHE SLTCRVFGYI  ISVLKSVSMA CLACISVDRY LAITKPLSYN QLVTPCRLRI CIILWIYSC LIFLPSFFGW  GKPGYHGDIF EWCATSWLTS AYFTGFIVCL LYAPAAFVVC FTYHFHKIC RQHTKEINDR  RARFPSHEVD SSRETHSPD RRYAMVLFRI TSVFIMLWLP YIYFLESS RVLNPTLSE  LTTWLAVSNS FCNCVIYSL NGVFRGLRR LFETMCTSCM CVKQDEAQP KPRKRANSCS  I</p>	Homo sapiens
489	160217 G Protein- Coupled	NM_005683	<p>atgagtcagc aaaacaccag tggggactgc ctggtttgacg gtgtcaacga gctgatgaaa A  accctacagt ttgcagtcca catccccacc ttgctcctgg gctgtcctct caacctgctg</p>	Homo sapiens

Receptor  
GPR55

Homo  
sapiens

490 160217 G Protein-Coupled Receptor GPR55 NP\_005674.1

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Homo  
sapiens

491 160219 G Protein-Coupled Receptor GPR35 NM\_005301

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gccaacctcc tgggttctg ggtctgctc ctgccccctg acgtgggct gacagtgcgc  
ctcgagtg gctggaacgc ctgtgcccctc ctggagacga tccgtcgcg cctgtacata  
accagcaagc tctcagatgc caactgctgc ctggacgcca tctgctacta ctacatggcc  
aaggagtcc aggagcgctc tgcactggcc tgggtcccc gtgctaaggc ccacaaaagc  
caggactctc tggcgtgac cctcgccctaa

Homo  
sapiens

492 160219 G Protein-Coupled Receptor GPR35 NP\_005292.1

NGTYNTCS SLDLWPPAIK LGFYAYLGVL LVGLLLNSL ALWFCRQM QWTETRIYMT P  
NLAVADLCLL CTLPLVLHSL RDTSDTPLCQ LSQGIYLTNR YMSISLVTAI AVDRYVAVRH  
PLRARGLRSP RQAAAVCAVL WVLVIGSLVA RWLLGQEGG FCFRSTRHNF NSMRFPLLGF  
YLPLAVVVEC SLKVVTALAQ RPPTDVQAE ATRKAARMVW ANLLVFVCF LPLHVGLTJR  
LAVGWNACAL LETIRRALYI TSKLSDANCC LDAICYIMA KEFQEAASALA VAPRAKAHKS



493	160221	G Protein-Coupled Receptor GPR27	NM_018971	QDSLCTLA	atggcggaacg cgagcgagcc gggtggcagc ggcgggcgcg agggcgccgc cctggggcctc A aagctggcca cgctcagcct gctgctgtgc gtgagcctag cgggcaacgt gctgttcgcg ctgctgatcg tgcgggagcg cagcctgcac cgcgccccgt actacctgct gctcgacctg tgcttgccg acgggctgcg cgcgctcgcc tgcctccccg ccgtcatgct ggcgggcgcg cgtgcggcgg ccgcggcggg ggcgccgcgg ggcgcgctgg gctgcaagct gctgccttc ctggccgcgc tcttctgctt ccacgcgcgc ttcctgctgc tggcgctggg cgtcacccgc tacctggcca tgcgcacca ccgcttctat gcagagcgcc tggcggcgtg gccgtgcgcc gccatgctgg tgtgcgcgc ctgggcgcg ctggtggcgtg gcgctggccg cggccttccc gccagtgcg gacggcggtg gcgacgacga ggacgcgcg tgcgccccg agcagcgcc cgacggcgcc ccggcgcg c tgggttctt gctgctgctg gctgtgggtg tggcgccac gaacctcgtc tacctccgc tgccttctt catccacgac cgcgcgaaga tgcggccccg gcgctgggtg ccgcgcgtca gccacgactg gaccttccac ggccggggcg ccacggcca ggcggcgcc aactggacgg cgggcttcgg ccgcggggcc agccggccc cgttgtggg catccggccc gcagggccgg gccggcgcc gcgcgcctc ctgctgctgg aagaattcaa gacggagaag aggctgtgca agatgttcta cgcgctcac ctgctcttcc tgcctctctg gggccctac gtcgtggcca gctacctgcg ggtcctgggtg cggccccgcg ccgtccccc ggctacctg acggcctccg tgtgctgac ctgcgcgag gccggcatca acccgctgct gtgcttctc ttcaacaggg agctgaggga ctgcttcagg gccagttcc cctgctgcca gagcccccg accacccagg cgaccatcc ctgcgacctg aaaggcattg gtttatga CLADGLRALA CLPAVMLAAR RAAAAAGAPP GALGCKLLAF LAALFCFHAA FLLLVGVT YLAIAHRRFY AERLAGWPCA AMLVCAAWAL ALAAAFPPVL DGGGDEDEDAP CALEQRPDGA PGALGFLLL AVVVGATHLV YLRLLFFIHD RRKMRPARLV PAVSHDWTFF GPGATGQAAA NWTAGFGRGP TPPALVGIRP AGPGRGARLL LVLEEFKTEK RLCKMFYAVT LLFLLWGPY VVASYLRVLV RPGAIVPQAYL TASWLTFAQ AGINPVVCFE FNRELDCFR AQFPCCQSPR TTQATHPCDL KGIGL	Homo sapiens
494	160221	G Protein-Coupled Receptor GPR27	NP_061844.1		atggtccttc acctcttgct gctctgtctc ctcccttgg tgcgagccac cgagccccac A gagggccggg ccgacgagca gagcgcgag cgcgccccg cgtgccccaa tgcctcgac ttcttctctt ggaacaacta cacttctcc gactgtcga acttgtggg caggaggcgc tacggcgctg agtcccagaa cccacgggtg aaagccctgc tcatgtggc ttactcctc atcattgtct tctcactctt tggcaacgtc ctggtctgtc atgtcatctt caagaaccag cgaatgcaact cggccaccag cctcttctc gtcaacctgg cagttggcca cataatgatc acgctgctca acacccctt cactttggtt cgttttgtga acagacatg gataattggg aagggcatgt gccatgtcag ccgctttgcc cagtactgct cactgcactg ctgacactg acactgacag ccattgcgtt ggatcgccc caggtcatca tgcacccctt gaaaccccg atctcaatca caaagggtgt catctacatc gctgtcatct ggaccatggc tacgttctt tcaactccac atgctatctg ccagaaatta tttaacctca aatacagtga ggacattgtg cgctccctct gcctgccaga cttccctgag ccagctgacc tcttctgaa gtacctggac ttggccacct tcatctgct ctacatctgt cccctcctca tcatctctgt ggcctacgt	Homo sapiens
495	160222	G Protein-Coupled Receptor GPR72	NM_016540			Homo sapiens

496	160222 G Protein- Coupled Receptor GPR72	NP_057624.1	<p>cggtgggcca agaaactgtg gctgtgtaaat atgattggcg atgtgaccac agagcagtagc  tttgccctgc ggcgcaaaaa gaagaagacc atcaaatgtg tgatgtggtg ggtagtcctc  tttgccctct gctgggtccc cctcaactgc tacgtctccc tctgtgccag caaggtcatc  cgaccaaca atgcccctca ctttgccctc cactgggttg ccatgagcag cacctgctat  aaccccttca tatactgctg gctgaacgag aacttcagga ttgagctaaa ggcattactg  agcatgtgtc aaagaccctc caagcctcag gaggacgggc aaccctccc agttccttcc  ttcaggggtg cctggacaga gaagaatgat ggccagaggg ctcctcttgc caataacctc  ctgccacct cccaactcca gtctgggaag acagacctgt catctgtgga accattgtg  acgatgagtt agaagaggtt ggaagaggg agtgggaggg gtctgtctcc acctgaggca  gggaagaga gctattctc acacatgac ttacagagtc tggaaacaca ctctgcaga  aggtgtagg actcttgaat tctaggaaa ctgtccagcc tctagcccc atgtgatgtg  aaaactaaaa ggcaccacca actagacatg tgttcataaa tcccatcta agaaacactg  ggaggcacag cagcctgtat ctctgaggaa gaggagcgag gacaacgttg gccagatgg  gggtgaatc attcaactgc ctccatctgt ggggcagctg ctgccttaca gcccttcta  ctagactgag catcccgag gtacacgggc cagggaaatg ccagcaa  cagagctctg cttgaaacag gtacacgggc cagggaaatg ccagcaa</p>	Homo sapiens
			<p>MVPHLLLLCL LPLVRATEPH EGRADEQSAE AALAVPNASH FFSWNYTFS DWQNFVGRRR P  YGAESQNPV KALLIVAYSF IIVFSLEGNV LVCHVIFKNQ RMHSATSLFI VNLAVADIMI  TLNTPFTLV RFNSTWIFG KGMCHVSREA QYCSLHVRH LTIAIADRH QVIMHPLKPR  ISITKGVII AVIWTMATEF SLPHAIQKL FTFKYSIEDIV RSLCLPDFPE PADLFWKYLD  LATFILLIYL PLIIISVAYA RVAKKLWLCN MIGDVTTEQY FALRRKKKT IKMLMLVVVL  FALCWFP LNC YVLLLSKVI RTNNALYFAF HWFAMSTCY NPFIYCLNE NFRIELKALL  SMCQRPPKPQ EDGQSPVPS FRVAWTEKND GQRAPLANNL LPTSQIQSGK TDLSSVEPIV  TMS</p>	
497	160223 G Protein- Coupled Receptor G2A	NM_013345	<p>gggaggggtg cgaggctagc cagcaggcg gggccctggg tcattttaa ctctcagagt A  gaactgtctg ataggaccga caagacgcat gacatgtact tagatagctt atcttagagc  cacactgaga ttggaaccg caaatatgc caggagagaa ggtgagcaag ggcacagaca  ctcaccgga taaaccac agcgcgagc agctgtggg gaaaccggan cctgcacac  cgccggggga agtggggcn ccgccacc cgtggaagaa cagcgcgan gacccccacg  agatgagacg gaactgcccgt gatgccagc aatnccnact gtgggtctga cccaggatan  cggaaagcag ggactggaac agcctctc atgttcttga caccgtcatt ctccagcagct  cagctaaagg acagaggcag ccgagcgtct gtccagcagag tctgtggctga gcagaacacg  ccacagcca cagccacac gccacacgtg caggattgct caagatggaa gggcacagtg  gaatatatat atatatatat atttttggcg agacccttga ggacacactg aatacaatgg  aataccatcc cgcctttgaa aggaaggga atcctggcac acgtgcaac aggagggagc  ttgaggacac tgtgtgagt ggagcacgtg agacacgaa ggacacacgc tgaagacacg  cagagatgcc caccacgtg ggaggtgac aggggagccc agcgacaga gacaaagtgg  aatggaggcc tgggggctgg gagcaaatgc ggagcgagtgt ctctctgggg cagagtctcc  gtttggggaag atgagaaggt tctgcccagc gatgctggcg atggttgtag aagaatgtga  atgtgccccaa tgctactgaa aaacggttac aatggaaacg ccaccacagt gaccaccact  gccccgtggg cctccctggg cctctccgc aagacctgca acaactgtc ctccgaagag</p>	Homo sapiens

498	160223	G Protein-Coupled Receptor G2A	NP_037477.1	MCPMLLKNGY NGNATPVTTT APWASLGLSA KTCNNVSFEE SRIVLVVVYS AVCTLGVPAN P	Homo sapiens
				CLTAWLALIQ VLOGNVLAVY LLCLALCELL YTGTLPLWVI YIRNQHRWTL GLLACKVTAY	
				IFFCNIIYVSI LFLCCISCDR FVAVVYALES RRRRRRTAI LISACIFILV GIVHYPVFQT	
				EDKETCFDML QMDSRIAGY YARETVGFAL PLSIIAFTNH RIFRSIKQSM GLSAAQKAKV	
				KHSAIAVWVI FLVCFAPYHL VLLVKAAAFS YVRGDRNAMC GLEERLYTAS VFVLCSTVN	
				GVADPIIYVL ATDHSRQEVLS RIHKGWKEWS MKTDVTRLTH SRDTEELQSP VALADHYTFS	
				RPVHPGSPC PAKRLIEESC	
499	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	NM_004767	cggtgtacagg gggcccaaga gctgggctgg ctgtctctctg ctcatccagc catcggtggg A	Homo sapiens
				ctgtggcccc tggctgtctc tcttgctgtg attttgctg tggggctaaag cagggtctct	
				gggggtgccc cccctgacct gggcaggcac agagccgaga cccagagga cagagccga	
				tccaagagg gacccagga tgaggaggcc aagggcgctg agcagtatgt gcctgaggag	
				tgggcggagt accccggccc cattcacct gctggcctgc agccaacaa gcccttggtg	
				gccaccagcc ctaaccccga caaggatggg ggcacccag acagtgggca ggaactgagg	
				ggcaatctga caggggcacc agggcagagg ctacagatcc agaaccctc gtatccggtg	

500	160224	Endothelin Type B Receptor- Like Protein 2 (ETBR-LP- 2)	NP_004758.1	<p>accgagagct cctacagtgct ctatgccatc atgctttctg cgtggtggtg gtttgcggtg  ggcattgtgg gcaacctgtc ggtcatgtgc atcgtgtggc acagctacta cctgaagagc  gcctggaact ccatacttgc cagcctggcc ctctgggatt ttctgttctt ctttttctgc  ctccctattg tcatcttcaa cgagatcacc aagcagaggg tactgggtga cgtttcttgt  cgtgccgtgc ccttcattga ggtctctctt ctgggagtc cgaatttcag cctctgtgcc  ctgggcatg accgcttcca cgtggccacc agcaccctgc ccaaggtgag gccatcgag  cgggtgccaat ccatactggc caagtggct gtcattctgg tgggctccat gacgtggct  gtgctgagc tctgtgtg gcagctggca caggagcctg cccccaccat gggcaccctg  gactcatgca tcatgaaacc ctacagccagc ctgcccagat cctgtattc actggtgatg  aactaccaga agcccgcat gtggtgttac ttgtgtgtct acttctgct gccatctctc  ttcacagtca cctgccagct ggtgacatgg cgggtgcgag gccctccagg gaggaagtca  gagtgcagg ccagcaagca ctagcagtgat gagagccagc tcaacagcac cgtggtgggc  ctgaccgtgg tctagcctt ctgcaccctc ccagagaacg tctgcaacat cgtggtggcc  tacctctcca ccgagctgac ccgccagacc ctggacctcc tgggctccat caaccagttc  tcaccttct tcaagggtgc catcaccca gtgctgtctc ttgcatctg caggccgtg  ggccaggcct tctggactg ctgctgtgc tgcgtgtg aggagtgcgg cgggctctg  gaggcctctg ctgccaatgg gtggacaac aagctcaaga ccgaggtgtc ctctccatc  tacttccaca agcccaggga gtacaccca cctctgccc tgggcacacc ttgctgaggc  cccagtaggg gtggggaggg agggagagc cggcacccc gccgtgtct gctgtcttt  cccataggt ctgctttgt tgcctgtctt gctgtctagg gatgacttg gttcctcttg  tcaagggttg ggaatccg</p>	MRWLWPLAVS LAVILAVGLS PEWAEYPRP IHPAGLQPTK YPVTESSYA YAIMLLALW FFCLPIVIFN EITKQRLG PIERCQSILA KLAVIIVGSM LVMTYQNARM WMYFGCYFCL VVGLTVVYAF CTLPENVCNI RPLGQAFLLDC CCCCCCECG	GRHRAETQEQ QRSKRGTED KDGTPDSGQ ELRGNLTGAP VMCIVVHWSY LKSAWNSILA VSSLGVTTF LCA LGIDREFH QLAQEPATM GTLDSCLMKP VTWRVRGPPG RKSECRASKH RQTLDLLGLI NQFSTFFKGA SDNKLKTEVS SSIYFHKPRE	EEAKGVQYV P GORLIQIONPL SLALWDFLVL VATSTLPKVR SASLPESLYS EQCESQLNST ITPVLLLCIC SPPLLPLGTP	Homo sapiens
501	160225	Sphingolipid Receptor Edg6	NM_003775	<p>gagtcagccc ccgggggagg ccatgaacgc caggggacc ccggtggccc ccgagtctcg A  ccaacagctg gcggccggcg ggcacagccg gctcattgt ctgcactaca accactcggg  ccggtggcc ggccgaggga ggccggcctg tggcgccctg gggccctgc ggggctgtc  ggtggccgc agctgcctg tgggtctgga gaactgtctg gtgctggcg ccatcaccag  ccacatgcgg tcgcagcgt ggtctacta ttgctgggtg aacatcacgc tgagtgcct  gtcacgggc ggccctacc tggccaacgt gctgctgtg ggggccgca ccttcgctt  ggcgcccgcc cagtgttcc tacgggaggg cctgctctt accgctctg ccgctccac  cttcagcctg ctcttactg caggggagcg ctttgcacc atggtgcggc cgggtggcga  gagcggggcc accaagacca gccgcgtcta cggcttcat ggcctctgct ggtgctggc  cgcgctgctg gggatgctg ctttgcctg ctggaactgc ctgtgcgct ttgaccgctg  ctccagcctt ctgcccctt actccaagcg ctacatctc ttctgcctg tgatcttcg</p>	gagtcagccc ccgggggagg ccaacagctg gcggccggcg ccggtggcc ggccgaggga ggtggccgc agctgcctg ccacatgcgg tcgcagcgt gtcacgggc ggccctacc ggcgcccgcc cagtgttcc cttcagcctg ctcttactg gagcggggcc accaagacca cgcgctgctg gggatgctg ctccagcctt ctgcccctt	ccatgaacgc caggggacc gctcattgt ctgcactaca tggcgccctg gggccctgc gaactgtctg gtgctggcg ttgctgggtg aacatcacgc gctgctgtg ggggccgca cctgctctt accgctctg cttgcacc atggtgcggc cggcttcat ggcctctgct ctggaactgc ctgtgcgct ctacatctc ttctgcctg	ccgagtctcg A accactcggg ggggctgtc ccatcaccag tgagtgcct ccttcgctt ccgctccac cgggtggcga ggctgctggc ttgaccgctg tgatcttcg	Homo sapiens

502	160225	Sphingolipid NP_003766.1	Receptor Edg6	<p> cggcgctctg gccaccatca tgggcctcta tggggccatc ttccgcctgg tgcaggccag  cgggcagaag gcccacgcc cagcgcccg ccgcaaggcc cgcgcctgc tgaagacggt  gctgatgac ctgctggcct tcttggtgtg ctggggccca ctctcgggc tgcgtctggc  cgacgtcttt ggtcccaacc tctggggcca ggagtacctg cggggcatgg actggatcct  ggccctggcc gtcctcaact cggcggtcaa ccccatcatc tactccttcc gcagcaggga  ggtgtgcaga gccgtgctca gcttctctg ctgcgggtgt ctcgggctgg gcacgcagg  gcccggggac tgcctggccc ggcccgctga ggtcacctcc ggagcttcca ccaccgacag  ctctctgagg ccaagggaca gctttcgcg cctccgctcg ctacgctttc ggatgcggga  gcccctgtcc agcatctcca gcgtgcggag catctgaagt tgcagtcttg cgtgtggatg  gtgcagccac cgggtgcgtg ccaggcaggc cctcctgggg tacaggaagc tgtgtgcacg  cagcctcgcc tgtatgggga gcagggaacg ggacaggccc ccatggtctt cccggtggcc  tctcggggct tctgacgcca aatgggcttc ccatggtcac cctggacaag gaggtaacca  ccccacctcc ccgtaggagc agagagcacc ctggtgtggg ggcgagtggg tccccacaac  cccgttctg tgtgattctg gggaagtccc ggcctctctc tgggcctcag tagggctccc  aggctgcaag ggtggactg tgggatgcat gccctggcaa cattgaagt cgatcatggt  aaaaa </p>	Homo sapiens
503	160228	T-Cell Death-Associated Gene 8 (GPR65)		<p> atgaacagca catgtattga agaacagcat gacctggatc actatttgtt tcccattgtt A  tacctcttg tgattatagt cagcattcca gccaatattg gatctctgtg tgtgtctttc  ctgcaaccca agaaggaaag tgaactagga atttacctct tcagtttgtc actatcagat  ttactctatg cattaactct cctttatgg attgattata ctggaataa agacaactgg  actttctctc ctgccttggt caaagggagt gctttctca tgtacatgaa gttttacagc  agcacagcat tctcacctg catggccgtt gatcggattt tggctgttgt ctaccctttg  aagtttttt tctaaaggac aagaagaatt gcactcatgg tccgctgtgc catctggata  ttggaaacca tctcaatgc tgtcatgttg tgggaagatg aaacagttgt tgaatatgctg  gatgccgaaa agtctaattt tactttatgc tatgacaaat accctttaga gaaatggcaa  atcaacctca actgtgtcag gacgtgtaca ggctatgcaa tacttttgtt caccatcctg  atctgtaacc ggaagtcta ccaagctgtg cggcacata aagccacgga aaacaaggaa  aagaagagaa tcatataaact acttgtcagc atcacagtta ctttgtctt atgctttact  ccctttcatg tgatgttgct gattcgtgctg attttagagc atgctgtgaa cttcgaagac  cacagcaatt ctgggaagcg aacttacaca atgtatagaa tcacgggttg attaacaagt  ttaaattgtg ttgctgatcc aattctgtac tgttttgta ccgaacacagg aagatatgat  atgtggaata tattaaaatt ctgcactggg aggtgtaata catcaaaaag acaagaanaa  cgatacttt ctgtgtctac aaagataact atggaattag aggtccttga gtag </p>	Homo sapiens

504	160228	T-Cell Death- Associated Gene 8 (GPR65)	NP_003599.1	MNSTCIEEQH LLYALTPLW KFFFLTRRI INLNLFTCT PFHVMILIRC MWNILKFTG RCNTSQRQK RILSVSTKDT MELEVL	DLDDHLYFP IDYTNKDNW ALMVSLSIW GYAIPVLTIL ILEHAVNFED HSNSGKRTYT MYRITVALTS LNCVADPILY CFVTETGRYD	YIFVLIIVSIP TFSPALCKGS LETIFNAVML ICNRKVYQAV HSNSGKRTYT RILSVSTKDT MELEVL	ANIGSLCVSF AFMYMKFYS WEDETWEYC RHNKATENKE MYRITVALTS LNCVADPILY CFVTETGRYD	LQPKKESELG STAFLTCTIAV DAEKSNFTLC KKRIIKLLVS ITVTFVLCFT	IYLFSLSLSD DRYLAVVYPL YDKYPLEKWKQ ITVTFVLCFT	Homo sapiens
505	160300	Encephalopsi n	NM_014322	cgagcccccgc ctcgggggaac ggggccggg ggcctggg gctgctcctc catcagcctc cctgaggaac cctcttcggg cgtgggtccat gctctactca cgtacacgga tgtgcttttc tggtccatatt agtgatcaag caccttcctg tggtcacctg tgtatacaat gcttctgtgc aagtgaatg aaaagtgact agttgacgac tttgtaggaa ctttcatcat aaccttggg ttgaacaaa tgcacacgat tatattttt tactgtaaaa tttgactgt taattctaga gtatgacaaa cagaggaatc gactcaaaag tgctatataa atttccca	cgcaagctga cgcagcggcg cggcgggga ctgctgctgg tactacaagt agcgacctgc ggctgggtgt attgtttcca gccagagtaga ctggcgtggg ctaggctgca ttatttcttg ctataattca gttttaaat gtctgttgga gtcactccaa ccagtgaatt ctcggactgc cagatcagac ttcaactctt agcgacaaaa tgaaggatgg cctcctgaag tccagcagga acaaattctt gggcactctaa aaattactct ataactgtcg tggaactctat atgaaaaaga gaggagtctt tacaaggcaa tcttttctt gccaggaggt tatatatattac	gcgcctcgc gccacggcta cactgagccc gtccattgg tccagcggct tggtgtccct gggacaccgt ttgccaccct tcaatttttc caggagcacc ctgtggactg gctgcctgg ttcgaatgct atgaaaagaa tgccttatat caatatctat atgtcttcat tgaggtgcca ccattgtgat cttccatcat ccattggggt caacgaaaag agaagtgtc aatccgaatt ttaaattcaac catcatcatc attttccaaa cgtacacatg tcagtgtcat aatcctctt agagacaact actcccatat tggtttgttg tcttaagacg atatacccg	cgcccgccgc ctgggagcgc cgcgcctc gtcgtgggc cgcactccc cttcgggggc gggtgcgtg aacgtgctg ctgggcctgg tctcctggga gaaatccaa ggcgccctg tcgttgtgtg actggccaaa cgtgatctgc ttcttgggtg ctctttgtac tttcgaaaag gagggcctgct gtcacagaaa gtggggcctta tttgatgc tggaataccc gcccataatg tcttgggcct gggtgcttta tctaatgtg tttggaatac acacgtaatg tgtgaagttag gtcctatatc gttggaatac ttgaatcctt gtcagcctgg cccaattg atgttctc ctagaacata tgatcaagtt aaagacgtt gtcagcctgg agaccagcac cccaattg aatctactg agattgtc atccccctg atgtttgtt	gggccatgta cgggcgctga gcacctacga acctgctggt tccctggtcaa tcgtgtcctg tggtgacgggt gcctatgaac agggccatta tggaacaggt gatgccaacg gggtgcatag gaagatcttc aatgatatt ttcttgggtg ttaatgggtca ctctttgtcta tttcgaaagt ccctttgtga cagcagctgg ggccaaagaa aatcactgtc aagttcgtcc cacttttggga aatggatgc gttctatgta atatcaacag caggaagagg cataatgaaa aaaccacttg ttggagattt tcatttcaaa gaaataacct ctgaattttt atcaaggaga tatatgtgca agaccagcac tgccccata tctttgtcga atccccctg taaaaaaaa	Homo sapiens	

Accession	Gene	Protein	Species	Sequence
506	160300 Encephalopsin		Homo sapiens	<p>aaaaaaaaaa</p> <p>MYSGNRSGGH GYWDGGGAG AEGPAPAGTIL SPAPLFSPGT YERIALLLGS IGLLGVGNNL P</p> <p>LVLVLYYKFQ RLRTPTHLL VNISLSDLIV SLFGVTFTFV SCLRNGWVWD TVGCVWDGFS</p> <p>GSILFGIVSIA TLTVLAYERY IRVHVHARVIN FSWAWRAITY IWLYSLAWAG APLLGWNRYI</p> <p>LDVHGLGCTV DWKSKDANDS SFVLFLFLGC LVVPLGVIAH CYGHILYSIR MLRCVEDLQT</p> <p>IQVIKILKYE KKLAKMCFLM IFTFLVCWMP YIVICFLVNV GHGHLVPTPTI SIVSYLFAKS</p> <p>NTVYNPVIYV FMIRKFRSL LQLLCLRLR CQPAKDLPA AGSEMQRPI VMSQKDGD RP</p> <p>KKKVTFNSSS IIFIITSDES LSVDDSDKTI GVQSLMLIQV RPL</p>
507	160312 Sphingolipid Receptor Edg5		Homo sapiens	<p>ataggcagct tgtactcgga gtacctgaac cccaacaagg tccaggaaca ctataattat A</p> <p>accaaggaga cgttggaac gcaggagagc acctccgcgc aggtggcctc ggccttcac</p> <p>gtcatcctct gttgcgccat tgtggtgaa aaccttctgg tgcctattgc ggtggcccg</p> <p>aacagcaagt tccactcgcc aatgtacctg ttctctggca acctggcgc ctcgatata</p> <p>ctggcaggcg tggccttcgt agccaatacc ttgtctctcg gctctgtcac gctgaggtg</p> <p>acgcctgtgc agtggtttgc ccgggagggc tctgcctcca tcaagctctc ggcctctgc</p> <p>ttcagcctcc tggccatgc cattgagcgc cactgtggca ttgccaaggt caagctgtat</p> <p>ggcagcgaca agagctgcgc catgtctctg cctcatgggg cctctgggt catctcgtg</p> <p>gtcctcggtg gcctgcccat ccttggtcgg aactgcctgg gccactcga ggcctgctcc</p> <p>actgtcctgc ctctctacgc caagcattat gtgctgtgcg tggtagaccat cttctccatc</p> <p>atcctgttgg ccactgtggc cctgtacgtg cgcactactt cgtgtctcg ctaagccac</p> <p>gtgacatgg ccgcccgcga gacgtagcc ctgctcaaga cggtcaccat cgtgctaggc</p> <p>gtctttatcg tctgtggtt gcccgccttc agcatcctcc ttctgacta tgcctgtccc</p> <p>gtccactcct gcccgatcct ctacaaagcc cactactttt tgcgcgtctc caccctgaat</p> <p>tcctctgctca acccgcctcat ctacacgtgg cgcagccggg acctgcggcg ggaggtgctt</p> <p>cggcgcgtgc agtgctggcg gccgggggtg ggggtgcaag gacggagcg ggtcgggacc</p> <p>ccgggcacc acctcctgcc actcgcagc tccagctccc tggagagggg catgcacatg</p> <p>ccacgtcac ccacgtttct ggagggcaac acggtggtct ga</p>
508	160312 Sphingolipid Receptor Edg5		Homo sapiens	<p>MGSLSEYLN PNKQEHVNY TKETLETQET TSRQVSAFI VILCCAIVE NLLVLIAR P</p> <p>NSKFHSAAYL FLGNLAASDL LAGVAFVANT LLSGSVTLR LTPQWFAREG SASITLSASV</p> <p>FSLLAIAIER HVIAIKVKLY GSDKSCRM L LIGASWLISI LVGLPLIGW NCLGHLEACS</p> <p>TVLLPLYAKHY VLCVWTFISI ILLAIVALYV RIYCVVRSSH ADMAAPQTLA LLKTVTIVLG</p> <p>VFIVCWLPAP SILLLDYACP VHSCPILYKA HYFAVSTLN SLLNPVIYTW RSRDLRREV L</p> <p>RPLQCWRPGV GVQRRRRVGT PGHLLPLRS SSSLERGMHM PTSPTFLEGN TV</p>
509	160314 G Protein-Coupled Receptor GPR103		Homo sapiens	<p>atgactcgtc gcagtgctct gagccctagg attcatcttt cttttcacg tagcctgact A</p> <p>ggcattgtat tagcaaatc atcactagac atcgtactac acgacacgta ctacgttgta</p> <p>gcccactgcg ggggaaatgt taggcgcctg cattgcgggtg gccccgcgc ccgggagcgc</p> <p>acagcaatgc aggcgcttaa cattaccccg gagcagttct ctcggctgct gcgggaccac</p> <p>aacctgacgc gggagcagtt catcgtctcg taccggctgc gaccgctcgt ctacacccca</p> <p>gagctgcggg gacgcgcca gctggccctc gtgctcaccg gcgtgctcat cttcgccctg</p> <p>gcactctttg gcaatgctct ggtgttctac gtgtgaccc gcagcaaggc catgcgcacc</p> <p>gtcaccaca tctttatctg tctcttgcg ctcagtgacc tgctcatcac cttcttctgc</p>

510	160314	G Protein- Coupled Receptor GPR103	ENSMRPT2217 53	<p>attccccgtca ccattgtctcca gaacatttcc gacaactggc tgggggggtgc tttcatttgc  aagatgggtgc catttgtcca gtctaccgct gttgtgacag aaatcctcac tatgacctgc  attgtctgtg aaaggcacc aaggacttgtg catccttita aatgaagtg gcaatacacc  aaccgaaggg ctttcacaat gctaggtgtg gtctggctgg tggcagtcac cgtaggatca  cccatgtggc acgtgcaaca acttgagatc aaatatgact tccatatga aaaggaacac  atctgtctgt tagaagagtg gaccagccct cctcttatgg aagaagaac gagctgtcat tatgatgggtg  ctgtcatcct cttcctctcg gaccagccct cctcttatgg aagaagaac gagctgtcat tatgatgggtg  acagtgggtg ctctcttggc tgtgtgctgg gcaccattcc atgtgtcca tatgatgatt  gaatacagta attttgaaa ggaatatgat gatgtcaca tcaagatgat ttttgcctac  gtgcaaatga ttggatttcc caactccatc tgtaatccca ttgtctatgc atttatgaat  gaaaacttca aaaaaatgt tttgtctgca gtttgttatt gcatagtaaa taaaaccttc  tctccagcac aaaggcatgg aaattcagga attacaatga tgcggaagaa agcaaaagttt  tccctcagag agaattccagt ggaggaaacc aaaggagaag cattcagtga tggcaacatt  gaagtcaaat tgtgtgaaca gacagaggag aagaaaaagc tcaaacgaca tcttgcctc  tttaggtctg aactggctga gaattctcct ttagacagtg ggcattaa</p> <p>RVGDGSLRT IHGEMSKIA RKKRAVINM VTVVAFVAVC WAPFHVHMM IEYSNFEKEY  DDVTIKMIFA IVQIIGFSNS ICNPIVYAFM NENFKKNVLS AVCYCVNKT FSPAQRHGN  GITMRRKKAK FSLRENPEVE TKGEAFSDGN IEVKLCEQTE EKKKLKRHLA LFRSELAENS  PLDSG</p>	Homo sapiens
511	160317	Neuropeptide FF 2 Receptor	NM_004885	<p>tctggagcca agtaatgggtg atactgatgc ttccttttct tggcgcgct cggattctga A  gtttcacaaag aatgtacctg ggtgcccctt agcgggatat gaatagcttc ttcggaaccc  cagcggccag ctggtgcctc ctggaagtgc acgtctcatc tgcaccggac aaggaggcgg  ggaggagcgc cagagcactc agcgtccagc agcgcggcgg gccagcctgg agcggaaagcc  tggagtggag caggcagtc cggggggaca gacgtcggct gggattgagc cggcagactg  cgaaaagttag ctggagccgg agcagggaca gaacctgttg ctgcagacgg gcttgggtgga  ttctgggttc tgcggccgac agggctcggc gggagaggtt catcatgaat gagaaatggg  acacaaactc ttcagaaaac tggcatccca tctggaatgt caatgacaca aagcatcatc  tgtactcaga tattaatatt acctatgtga actactatct tcaccagcct caagtggcag  caatcttcat ttttccctac tttctgatct tctttttgtg catgatggga aatactgtgg  tttgctttat tgtaatgagg aacaaacata tgcacacagt cactaatctc ttcactctaa  acctggccat aagtgttga ctagtggcga tttctgcat gcctataaca ctgctggaca  atattatagc aggatggcca tttggaaca cgtatgtgcaa gatcagtgga ttggtccagg  gaatatctgt cgcagcttca gtctttacgt tagttgcaat tgctgtagat aggttccagt  gtgtgggtcta cctttttaa ccaagctca ctatcaagac agcgtttgtc attattatga  tcatctgggt cctagccatc acctattatgt cctcatctgc agtaagtga catgtgcaag  aagaaaaata ttaccgagt agactcaact ccagaataa aaccagtcca gtctactgggt  gccgggaaga ctggccaaat caggaaatga ggaagatcta caccactgtg ctgtttgcca  acatctacct ggctccccct tccctcattg tcatcatgta tggaggattt ggaatttcac  tcttcagggc tgcagttcct cacacaggca ggaagaacca ggagcagtg cactgggtgt  ccaggaaaaa gcagaagatc attaatgagc tctgtgtgtt ggccctgctt tttattctct</p>	Homo sapiens



512	160317 Neuropeptide NP_004876.1 FF 2 Receptor	catggctgcc cctgtggact ctaatgatgc tctcagacta cgctgacctt tctccaaatg aactgcagat catcaacatc tacatctacc ctttttgaca ctggctggca ttcggcaaca gcagtgtaaa tcccatcatt tatggtttct tcaacagagaa ttccgcccgt gttttccaa aagctttcca gctccagctc tgccaaaaa gagcaaaagcc tatggaagct tatacctaa aagctaaaaa ccatgtgctc ataaacacat ctaatcagct tgtccaggaa tctacattc aaaaccctca tggggaaacc ttgctttata ggaagaagtc tgaaaaaacc caacaggaat tagtgatgga agaattaaaa gaaactacta acagcagtga gatttaaaa gagctagtgt gataatccta actctactac gcattatata tttaaatcca ttgctttttg tggctttgca cttcaaatct tcaagaatgt gtctaaata aaacatttac tgaagaccct ctctggcaaa aaaattaaaa ataaacaaa atggtcataa gatcataaac aatcttatgt tgtataaaa tagctagagt gacttagaca tgtttgcatg aataaatata tttctagaga acagttaaaa aaaaaaaaa aaaaa	P	Homo sapiens
513	160324 G Protein-Coupled Receptor GPR86/GPR94/ P2Y13	aaacagtattt tccttttcaa cacatctatt gaaagtgttg gataaatgca ggatgttaat A atgctataaa cataaagtct gtttttaaaa aatagcattt gaaaatcatg aagggctttt tgtttcttt tgtttgata tatgtttatt ggtaacaggt gacactggaa gcaatgaaca ccacagtgt gcaaggcttc aacagatctg agcgggtgcc cagagacact cggatagtac agctggtatt ccagccctc tacacagtgg ttttcttgac cggcatcctg ctgaataactt tggctctgtg ggtgtttgtt cacatcccca gctcctccac ctctcatc tacctcaaaa acactttggt ggcgacttg ataatgacac tcatgcttcc ttcaaaaac ctctctgact cacactggc accctggcag ctcagagctt ttgtgtgtcg tttttcttcg gtgatatttt atgagaccat gtatgtgggc atcgtgtgtg tagggctcat agcctttgac agattctca agatcatcag acccttgaga aatatatttc taaaaaaa tgtttttgca aaaaagctct caatcttcac ctggttcttt ttgttcttca tctccctgcc aaatatgac ttgagcaaca aggaagcaac accatcgtct gtgaaaaagt gtgcttccct aaaggggcct ctggggctga aatggcatca aatggtaaaat aacatatgcc agtttatatt ctggactgtt ttatccttaa tgcttggttt ttatgtggtt attgcaaaaa agtatataga ttcttataga aagtcacaaa gtaaggacag aaaaaaac aaaaagctgg aaggcaaatg atttgtgtc gtggctgtct tctttgtgtg ttttgcctca ttctatttg ccagagttcc atatactcac agtcaacca acaataagac tgaactgtaga ctgcaaaatc aactgtttat tgctaaagaa acaactctct ttttggcagc aactaacatt tgtatggatc ccttaataata cataattctta tgtaaaaaat tcacagaaaa gctaccatgt atgcaaggga gaaagaccac agcatcaagc caagaaaatc atagcagtca gacagacaac ataaccttag gctgacaact gtacataggg ttaacttcta	A	Homo sapiens

514	160324	G. Protein- Coupled Receptor GPR86/GPR94/ P2Y13	NP_076403.1	<p>           tttattgatg agacttcctg agataaatgtg gaaatcaaat ttaaccaaga aaaaaagatt            ggaacaaatg ctctcttaca ttttattatc ctggtgtaca gaaaagatta tataaaattt            aaatccacat agatctattc ataagctgaa tgaaccatta ctaagagaaat gcaacaggat            acaaatggcc actagaggtc attattctt tctttctttt tttttttt aatttcaaga            gcatttcact ttaacatttt gaaaagact aaggagaaac gtatatccct acaaacctcc            cctccaaa cctctcaca tcttttcca caattcacat aacactactg cttttgtgcc            ccttaaatgt agatatgtgc tgaagaaaaa aaaaaagcc caactcttga agtccattgc            tgaaaactgc agccagggtg tgaagggtg gcagacttga agagtctgag gaactgaagt            gggtcagcaa gaccttgaa atctgggta aggattttc tccttacaat taaaaacagc            ctctttcaca ttacaataat ataccatagg aggcacaagc accattatta agccactttg            cttacacctt aagtgtgtac aattcaagt tgaagaatgct gtgttaacta tcttttgaa            ttctccttct gtccagcaaa tactctaag atggttaaac atggcaccta ctacgcaatg            ccttcctgga ccacaacccc tatccccctg cccacccctc ctcatataaa acaataactt            ctactgtttg ggtgtgtgat aggtttctca atgcagatct cctttttcta gttagctata            ttcttgactg catccgctaa aatgtttaa gcttcttgag agacagacat gccagatttt            cttggtatct ccataatac gacctacagt ccatggtcta cagatgtttt aaatagaatt            gctattctcg atacatacaa agacgtaatt gctgacccac aatcagtaac atccatattg            ggagattttt caaaggatgg tgacctgct tgtatttatt taccttgta ttttttcttg            catccttctg tgattcaaaa aagtaaaatg tggctttctg aaatgatgga taagagtcta            catcttctag aaaaaataca taaaggagta gttaaagtct gtaaatgag cagagctcc            aacacgacca tcgtagggtg aagccacgt tttcttccat ggcctcaag gccctagaac            ttgacctact ttctggcctt acctcctagc tacttatcca tctctgaac tttatactct            tgtataaatt tctaactttc agaaaatgcc atactctgtt ttggcaccac acatgtatat            ttccccctgg tacacttga agactcttat ccatctgtga aacctatgt tgtcatcact            tgggtccatga aatataact ggccaatc ccaccatcac ctcaaaccca atcacccct            cctctgtatg ctgtcacacc tatattatta aacttatcac attgcatgt aattactcc            tgacctttgt atctactctt ttagtaactg atgtatatat ctgaaaggag agattgttc            attgtgcaat caataaatgt ttgataaaat aaagccc         </p>	<p>           NTLLWVFWH IPSSSTFIY P            TVVFLTGILL            RAFCVCRFSSV IFYETMYVGI VLLGLIAFDR            FFISLPNMIL SNKEATPSSV KKCASLKGPL            AKKVDYSYRK SKSKDRKNNK KLEGRVFWV            QNQLFIKET TLFLAATNIC MDPLIYIFLC            TLG         </p>	Homo sapiens
515	160329	Proteinase- Activated Receptor 4	NM_003950	<p>           ctccccaggg ctggctggca agcggccctg gtgggtctgc ggggcaggg gcagccttc A            tgggttatct ccaacggcgc gatctgctgc tccgcctcgg ctccagaagc tggggtcag            ggtccggcga ggcaggaaagc ctgaggccac agccagagc agcctgagtgc cagtcatgtg            ggggagactg ctctgtggc cctgtgtgt ggggttcagc ctgtctggcg gcacccagac            cccagcgtc tacgacgaga gcgggagcac cggaggtggt gatgacagca cgccctcaat            cctgcctgcc ccccggtgct acccaggcca agtctgtgcc aatgacagt acacccctgga            gctcccgac agtcacggg cactgcttct gggctgggtg cccaccaggc tgggtgcccgc         </p>	<p>           ggggcaggg gcagccttc A            ctccagaagc tggggtcag            agcctgagtgc cagtcatgtg            ctgtctggcg gcacccagac            gatgacagca cgccctcaat            aatgacagt acacccctgga            cccaccaggc tgggtgcccgc         </p>	Homo sapiens

cctctatggg ctggtcctgg tgggtggggt gccggccaat ggggtggcgc tgtgggtgct  
ggccacgcag gcacctggc tgcctccac catgctctg atgaacctcg cgactgctga  
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gccaagcaca gccacagcc accagcagcc aggagcagg cctgggacgg gctctccctc  
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ctcggcttct tgggtgggat gcagccacg acgactgggt gctctgagatg gggctggagc

516	160329	Proteinase- Activated Receptor 4	NP_003941.1	<p> tggggctggg gctgcattoo ctggagactc actgcaagtt cctgccagg aggtgaggg  caccatcc tcaagtccca atgtgtggc ccaccaggc ccagagcctg gttggccatt  ctcatgcca ccagcttctg gcttgggat gtctcttgag caaccagaat agcaccacca  actctgtcc ccaaaacca tcaatagcac ggctcagcct cctgtatcc cctgactgct  gggaccctc gccttccctc ctctcactg caggctgac cttctttca cttctgtca  atgtcaccag ggataagtg ggacaatggg gggtgggggt ggacagtgtg tgtggggggg  ttcgggtgct gcagacctg aactcccttc tgccaggatg ttggcagccg gttgtaagcc  ttgcacggga cagaccacac ccaccgcaac ctcatccctc cagcactaac cacatccact  ctcaaccccg tccccttcgc actgaccaca ccaccccggt tggccccgc ccccgcaact  gaacactccc gccctcaacc ccgaccctc cgcactcaac tccccctgc cgtcagcccc  cgccctcacc aactgacca cctcaaccc attgcgcca gtccccacca cagtgaccac  accctcactg gctcgccct gcccccagta tactgacct tccccagca cttcccttcc  gcacttacca ctccccagc cagccccctc ccgctgacc gctcctccag ccccgctcc  ccgtacagg cagagcgccc gccacctct atgtctggtt ctctgactt tacgttggtc  cctcctctgc caagcccca ggggagccct cctggcgctc cgagggtggg agtcgggggtg  tggcaggccg cgttgggggg cggcagtggc tccgagcact ccccgggcc cgggacaggg  gcggtccca ctctgttgca cgcgggtccg gcgcacagtt cccggcgag tgggtgtgctc  gtctgacct tgtagaagc agtggcctcg aaggtctacg gacgaggtg gcgggtgacc  aagtgcagg gcgacgggtc agggaccgg cggggccgg ggtcgggcg cgcgggccta  ccgggtctgt agtagtcgta caggagact ggacgccc acgtcctgcc caccacgcac  tccggagag cagggaacc cagcacgtc aggcacggc tgggagatcg tggggcagcg  gcggcgag cctgacccg ggcaggagg cccggggcg tgagctcagg ccagaaactg  gctgatttca gggataccca ggacgcgtga aacacagaag aaactgtatc ccatcttctt  ttttctttt acttttctt ttttttttt tctctgagac agagtctgc gctgttgccc  aggctggagt gcagtggct gatctggct cactgcaagc tcggcctcct gggttcaaat  gattctcctg cctcagctc ccaagtagct ggataacag gcgccccca ccgacccctg  ctaattttt gtatttttga tcaagacgga gtttcacctt gttggccagg ctggtctcca  actcctgccc tcaagtgate cgcctcggtc ccatttttt tcttttgggt ccttccatcc  cactgggaaa acgtctcagg tggcctctga aacaccactc ctttttgggt gtgtgcacgc  atggctgagc atgtgtgggt gggagtcagc acattcacga tactgtgcaa tcatcacctc  tgtctagtta caggacggtt tctttctccc ccaagaagaa cccatcgcca tcagcactca  ctccccactc cccagcccc tggcaaccac aaatctttcc aactctacgg atttgcctgt  tctgggcatt tcatgtcaat ggaatcatgt actctgtgaa aaaaaaaaa aaaaaaaaa  aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaa  MWGRLLWPL VLGFSLSGGT QTPSVYDESG STGGGDDSTP SILPAPRGYP GQVCANDSDT P  LELPDSSRAL LLGWVTRLV PLYGLVLV GLPANGALW VLATQAPRLP STMLLMNLAT  ADLLALALP PRIAYHLRGQ RWPFGAAR LATAALYGHM YGSVLLAAV SLDRYLALVH  PLRARALGR RLALGLCAA WLMMAALALP LTLQRQTERL ARSDRVLCHD ALPLDAQASH  WQPAFTCLAL LGCFLPLAM LLCYGATLHT LAASGRRYGH ALRLTAVVLA SAVAFFVPSN  LLLLHYSDP SPSAWGNLYG AYVPSLALST LNSCVDPIY YYVSAEFRDK VRAGLFQRSP  GDTVASKASA EGGSRGNGTH SLLQ </p>	Homo sapiens
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520	160387 Glucagon-Like Peptide 2 Receptor	NP_004237.1	<p>           ggagaaagta aggctgagct gcggaataac tgggtccgct tctgtgtagc ccgccaactca            ggctgcagag cctgtgtcct gggaagagac ttccgggtcc taggaaatag tcccaagaag            ctctcggaag gagatggcg tgagaagctt cggaagctgc agccctcact taacagtggg            cggtccctac atctagccat gcgaggtctt gggaagctgg gcgccaagcc ccaacaggac            catgcacgct ggccccggg cagcagcctg tccgagtgca gtgaggggga tgtcaccatg            gccaacacca tggaggagat tctggaagag agtgagatct ag            MKLGSSRAGP GRGSAGLLPG VHELPMGIPA PWGTSPLSFH RKCSLWAPGR PFLTLLVLS P            IKQVTGSLLE ETTRKWAQYK QACLRDLKE PSGIFCNGTF DQYVCMWPHSS PGNVSVPCPS            YLPWSEESS GRAYRHCLAQ GTWQTENAT DIWQDDSECS ENHSEKQNV DRYALLSTLQL            MYTVGYSFSL ISLFLALTLL LFLRLHCTR NYIHMNLFAS FILRTLAVLV KDVVFYNSYS            KRPDNENGWM SYLSEMSTSC RSVQVLLHYF VGANYLWLLV EGLYLHLLLE PTVLPERRLW            PRYLLLGWAF PVLFVVPWGF ARAHLENTGC WTTNGNKKIW WIIRGPMMLC VTNVFFIFLK            ILKLLISKLK AHQMCFRDYK YRLAKSTLV L IPLLGVHEIL FSFIDDDQVE GFAKLIRLFI            QLTLSFHGF LVALQYGFAN GEVKAELRY WVRFLARHS GCRACVLGKD FRFLGKCPKK            LSEGDAEKL RKLQPSLNSG RLLHLAMRGL GELGAQPQQD HARWPRGSSL SECSEGDVTM            ANTMEEILEE SEI         </p>	Homo sapiens
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Homo  
sapiens

525 160397 Latrophillin- NM\_012302

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694	127	5-HT1A Receptor	P08908	610	RIPEDRSDPDACTISK	Homo sapiens
695	127	5-HT1A Receptor	P08908	612	RHGASAPAPQPKKSVNGE	Homo sapiens
696	128	5-HT1B Receptor	P28222	585	KQIPNRTIGKRLTRAQLTD	Homo sapiens
697	128	5-HT1B Receptor	P28222	586	SPGSTSSVTSINSRVPD	Homo sapiens
698	128	5-HT1B Receptor	P28222	598	KVRVSDALLEKKKLMA	Homo sapiens
699	128	5-HT1B Receptor	P28222	599	ANLSSAPSQNCsAKD	Homo sapiens
700	129	5-HT1D Receptor	P28221	577	IKLADSALERKRISAA	Homo sapiens
701	129	5-HT1D Receptor	P28221	588	QEASNRSLNATETSEA	Homo sapiens
702	129	5-HT1D Receptor	P28221	589	RIYRAARNRILNPPSL	Homo sapiens
703	129	5-HT1D Receptor	P28221	590	KAQEEMSDCLVNTSQIS	Homo sapiens
704	130	5-HT1E Receptor	P28566	815	RHLSNRSTDsQNSFASC	Homo sapiens
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746	139	5-HT7 Receptor	P34969	660	CANLSRLKHERKNISIFKR	Homo sapiens
747	139	5-HT7 Receptor	P34969	663	KLAERPERPEFVLKAC	Homo sapiens
748	272	Adenosine A1 Receptor	AAAI7544.1	8	CHKPSILTVAIFLT	Homo sapiens
749	272	Adenosine A1 Receptor	AAAI7544.1	9	NGSMGEPVKEFEKVISME	Homo sapiens
750	272	Adenosine A1 Receptor	AAAI7544.1	10	NKKVSASSGDPQKYVGKELK	Homo sapiens
751	272	Adenosine A1 Receptor	AAAI7544.1	11	NDHFRCPAPPIDEDLPEER	Homo sapiens
752	272	Adenosine A1 Receptor	P25099	286	CQPKPIDEDLPEEKAE	Rattus norvegicus
753	272	Adenosine A1 Receptor	P25099	302	QPKPIDEDLPEEKAE	Rattus norvegicus
754	272	Adenosine A1 Receptor	AAAI7544.1	303	MPPSISAFQAAYIGIEVL	Homo sapiens
755	273	Adenosine A2a Receptor	P29274	1237	QGNLGLPDVELLSHELKGV	Homo sapiens
756	273	Adenosine A2a Receptor	P29274	1238	MPIMGSSVMITVELAIA	Homo sapiens
757	273	Adenosine A2a Receptor	P29274	1239	RSHVLRQQEPEFKAAGT	Homo sapiens
758	273	Adenosine A2a Receptor	P11617	1240	RIREFRQTFKIRSH	Canis familiaris
759	274	Adenosine A2b Receptor	P29275	676	KDSATNINCTEPWDGTINES	Homo sapiens
760	274	Adenosine A2b Receptor	P29275	677	CRGLQRTELMDHSRTLQRE	Homo sapiens
761	274	Adenosine A2b Receptor	P29275	678	RNRDFRYTFHKISRYLLC	Homo sapiens
762	274	Adenosine A2b Receptor	P29275	679	CQADVKSGNGQAGVQP	Homo sapiens

763	274	Adenosine A2b Receptor	P29275	680	CVTLFQPAQGNKPKW	Homo sapiens
764	274	Adenosine A2b Receptor	P29275	2714	MILETQDALVVALELVIAAL	Homo sapiens
765	275	Adenosine A3 Receptor	P33765	683	IFYIRNKLNLNSKE	Homo sapiens
766	275	Adenosine A3 Receptor	P33765	686	NMKLTSEYHRNVTLSC	Homo sapiens
767	275	Adenosine A3 Receptor	P33765	687	AYKIKKFETYLLIKAC	Homo sapiens
768	275	Adenosine A3 Receptor	P33765	689	TGAFYGREFTAKSLF	Homo sapiens
769	275	Adenosine A3 Receptor	P33765	2296	KRVTHRRRIWLALGLC	Homo sapiens
770	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	4	CPRVVLPEEIFFTIS	Homo sapiens
771	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	5	MGYLKPRGSFETTADDIIDS	Homo sapiens
772	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	6	RYHSIVTMRRTVVVLT	Homo sapiens
773	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	7	AFRSPELURDAFKKMIFC	Homo sapiens
774	376	Alpha 1d-adrenoceptor	AAA35496.1	12	RSTRSLEAGVKRERGKASE	Homo sapiens
775	376	Alpha 1d-adrenoceptor	AAA35496.1	13	KEPVPPDERFCGITEEAG	Homo sapiens
776	376	Alpha 1d-adrenoceptor	AAA35496.1	14	RSTEMVQRLRMEAVQ	Homo sapiens
777	376	Alpha 1d-adrenoceptor	AAA35496.1	15	PRPSCAPKSPACRTRSP	Homo sapiens
778	377	Alpha 1b-adrenoceptor	P35368	696	KEMNSKELTIRHSK	Homo sapiens
779	377	Alpha 1b-adrenoceptor	P35368	697	GGSLERSQSRKDSLDDSGSC	Homo sapiens
780	377	Alpha 1b-adrenoceptor	P35368	698	APEPPGRRGRHDSGPL	Homo sapiens
781	377	Alpha 1b-adrenoceptor	P35368	699	KLLTEPESPGTDGGASNGGC	Homo sapiens
782	379	Alpha 1c-adrenoceptor	AAA93114.1	1245	GSGMASAKTKTHFSVR	Homo sapiens
783	379	Alpha 1c-adrenoceptor	AAA93114.1	1246	RIPVGSRETFYRISKTDGVC	Homo sapiens
784	379	Alpha 1c-adrenoceptor	AAA93114.1	1247	SSMPRGSAKITVSKDQSSC	Homo sapiens
785	379	Alpha 1c-adrenoceptor	AAA93114.1	1248	ESRGLKSLKTDKSDS	Homo sapiens
786	387	Alpha 2a-adrenoceptor	P08913	1343	ERRPGLGERSAGPG	Homo sapiens
787	387	Alpha 2a-adrenoceptor	P08913	1344	PGEPAPAGPRDITDALD	Homo sapiens
788	387	Alpha 2a-adrenoceptor	P08913	1345	RGPRGKGKARASQVKPGD	Homo sapiens
789	387	Alpha 2a-adrenoceptor	P08913	1346	RPGATGIGITPAAGPGE	Homo sapiens
790	387	Alpha 2a-adrenoceptor	P08913	1347	RVGAAKASRWGRQNRE	Homo sapiens
791	388	Alpha 2b-adrenoceptor	P18089	1348	IYKGDQGGPQPRGRPQC	Homo sapiens

792	388	Alpha 2b-adrenoceptor	P18089	1349	RSNRRGPRAKGGPGQGE	Homo sapiens
793	388	Alpha 2b-adrenoceptor	P18089	1350	ASAREVNGHSKSTGEK	Homo sapiens
794	388	Alpha 2b-adrenoceptor	P18089	1351	RGVGAIGGQWRRRAH	Homo sapiens
795	389	Alpha 2c-adrenoceptor	P18825	1352	RAPVGPDGASPTENG	Homo sapiens
796	389	Alpha 2c-adrenoceptor	P18825	1353	RTGTARPRPTWSRTR	Homo sapiens
797	389	Alpha 2c-adrenoceptor	P18825	1354	ASRSPGPGGRLSRASS	Homo sapiens
798	389	Alpha 2c-adrenoceptor	P18825	1355	RSVEFFLSRRRRARSSVC	Homo sapiens
799	599	Bradykinin B1 Receptor	P46663	798	PMASGRQRRRQARVTC	Homo sapiens
800	599	Bradykinin B1 Receptor	P46663	799	NYHILASLRTREEVSR	Homo sapiens
801	599	Bradykinin B1 Receptor	P46663	800	RVRGPKDSKTTAULT	Homo sapiens
802	599	Bradykinin B1 Receptor	P46663	801	VGRLFRTKVWELYKQC	Homo sapiens
803	600	Bradykinin B2 Receptor	AAB02793.1	794	FRIMKEYSDEGHNVTC	Homo sapiens
804	600	Bradykinin B2 Receptor	AAB02793.1	795	CTMQIMQVLRNNEMQKFKE	Homo sapiens
805	600	Bradykinin B2 Receptor	AAB02793.1	796	CQDERIIDVITQIASFM	Homo sapiens
806	600	Bradykinin B2 Receptor	AAB02793.1	797	CRSEPIQMENSMTLRIS	Homo sapiens
807	635	Beta-1 adrenoceptor	AAAS1667.1	1357	RVFREAAQKVKKIDSC	Homo sapiens
808	635	Beta-1 adrenoceptor	AAAS1667.1	1358	CERFLGGPARPPSPS	Homo sapiens
809	635	Beta-1 adrenoceptor	AAAS1667.1	1359	ANGRAAGKRPSRLVALRE	Homo sapiens
810	635	Beta-1 adrenoceptor	AAAS1667.1	1360	CARRAARRRHATHGDRPRAS	Homo sapiens
811	635	Beta-1 adrenoceptor	AAAS1667.1	1361	CLARPGPPSPGAASD	Homo sapiens
812	635	Beta-1 adrenoceptor	AAAS1667.1	1362	CNGGAAADSDSSLDEP	Homo sapiens
813	640	Beta-2 adrenoceptor	NP_000015.1	2654	KRQLQKIDKSEGRFHV	Homo sapiens
814	640	Beta-2 adrenoceptor	NP_000015.1	2656	GEQSGYHVEQEKENKLLC	Homo sapiens
815	640	Beta-2 adrenoceptor	NP_000015.1	2662	APNRSHAPDHDVTQQR	Homo sapiens
816	640	Beta-2 adrenoceptor	NP_000015.1	2663	VPLVIMVFVYSRVFQE	Homo sapiens
817	643	Beta-3 adrenoceptor	P13945	1390	RGELGRFPPEESPAP	Homo sapiens
818	643	Beta-3 adrenoceptor	P13945	1391	SRS LAPAPVGTCAPE	Homo sapiens
819	643	Beta-3 adrenoceptor	P13945	1392	GVPACGRRPARLLPRE	Homo sapiens
820	643	Beta-3 adrenoceptor	P13945	1393	PSGVPAARSSPAQPRLC	Homo sapiens
821	688	Opsin, blue-sensitive	NP_001699.1	1753	EEEFYLFKNISSVGPWDGPQ	Homo sapiens
822	688	Opsin, blue-sensitive	NP_001699.1	1754	CGPDWYTVGTYRSESYT	Homo sapiens
823	688	Opsin, blue-sensitive	NP_001699.1	1755	NNRNHGLDLRLVTIPS	Homo sapiens
824	688	Opsin, blue-sensitive	NP_001699.1	1756	IMKMVCGKAMIDESDT	Homo sapiens
825	692	Bombesin Receptor	AAA35604.1	20	SITNDTESSSSVVSNDNTNK	Homo sapiens
826	692	Subtype-3 Bombesin Receptor	AAA35604.1	21	KAVVKPLERQPSNAILKTC	Homo sapiens

827	692	Bombesin Receptor Subtype-3	AAA35604.1	22	RDPNKNMTFESCISYPVSKK	Homo sapiens
828	692	Bombesin Receptor Subtype-3	AAA35604.1	23	RTLYKSTLNIPTEEQSHARK	Homo sapiens
829	692	Bombesin Receptor Subtype-3	AAA35604.1	24	KSFQKHFKAKQLFCCKAERPE	Homo sapiens
830	692	Bombesin Receptor Subtype-3	NP_001718.1	2286	NKGWSDNSPGIEALC	Homo sapiens
831	692	Bombesin Receptor Subtype-3	NP_001718.1	2287	QRQPHSPNQTLISITNDIE	Homo sapiens
832	692	Bombesin Receptor Subtype-3	NP_001718.1	2288	RPEPPVADTSLTLAV	Homo sapiens
833	692	Bombesin Receptor Subtype-3	NP_001718.1	2289	SEISVTSFTGCSVKQAEADR	Homo sapiens
834	729	CXC Chemokine Receptor 5	P32302	1382	ELDRLDNYNDTSLVENHLC	Homo sapiens
835	729	CXC Chemokine Receptor 5	P32302	1383	SQGHNNNSLPRCTFSQE	Homo sapiens
836	729	CXC Chemokine Receptor 5	P32302	1384	CYGVVHRLRQAQRPP	Homo sapiens
837	729	CXC Chemokine Receptor 5	P32302	1385	CQLFPSWRRSSLESENA	Homo sapiens
838	735	C-C Chemokine Receptor 1	P32246	305	TEDYDTTTEFDYGDATPC	Homo sapiens
839	735	C-C Chemokine Receptor 1	P32246	1242	ASMPGLYFSKTQWEFTHTC	Homo sapiens
840	735	C-C Chemokine Receptor 1	P32246	1243	CSLHFPHESLREWKLFQA	Homo sapiens
841	735	C-C Chemokine Receptor 1	P32246	1244	TILSVFQDFLFHEC	Homo sapiens
842	737	C-C Chemokine Receptor 3	P51677	1386	CSALYPEDTVYSWRHF	Homo sapiens
843	737	C-C Chemokine Receptor 3	P51677	1387	PEFIFYETEELFEETLC	Homo sapiens
844	737	C-C Chemokine Receptor 3	P51677	1388	SSYQSILFGNDCERSK	Homo sapiens
845	737	C-C Chemokine Receptor 3	P51677	1389	GRYPFLPSEKLERIS	Homo sapiens
846	737	C-C Chemokine Receptor 3	P51677	1751	DDVGLLCEKADTRALMAQFV	Homo sapiens
847	738	C-C Chemokine Receptor 4	P51680	306	MNATEVDTTQDETIVNSY	Mus musculus
848	738	C-C Chemokine Receptor 4	P51679	348	DESYSNVYLYESIPKPC	Homo sapiens
849	738	C-C Chemokine Receptor 4	P51679	351	DTPSSSYTQSTMDHDLHD	Homo sapiens
850	738	C-C Chemokine Receptor 4	P51679	353	LETLELEVLQDCTFE	Homo sapiens
851	738	C-C Chemokine Receptor 4	P51679	491	RNHTYCKTKYSLNSTWK	Homo sapiens
852	741	C-C Chemokine Receptor 7	P32248	748	CQDEVTDDYIGDNTVD	Homo sapiens
853	741	C-C Chemokine Receptor 7	P32248	846	PELLYSDLQRSSEQAMRC	Homo sapiens
854	741	C-C Chemokine Receptor 7	P32248	847	QLRQWSSCRHIRRSMSE	Homo sapiens
855	741	C-C Chemokine Receptor 7	P32248	848	GVKFRNDLFLKLDLGC	Homo sapiens
856	742	C-C Chemokine Receptor 8	P51685	359	PDIFSSPCDAELIQING	Homo sapiens

857	742	C-C Chemokine Receptor 8	P51685	360	KILHQLKRCQNHNTKAIK	Homo sapiens
858	742	C-C Chemokine Receptor 8	P51685	362	SQIFNYLGRQMPRESC	Homo sapiens
859	742	C-C Chemokine Receptor 8	P51685	493	FVGEKFKHLSEIFQKSC	Homo sapiens
860	752	CXC Chemokine Receptor 3	P49682	1371	ENFSSSYDYGENSEDSC	Homo sapiens
861	752	CXC Chemokine Receptor 3	P49682	1372	CYAHILAVLLVSRGQRRLRA	Homo sapiens
862	752	CXC Chemokine Receptor 3	P49682	1373	MVLEVSDHQVLNDAEVAALL	Homo sapiens
863	752	CXC Chemokine Receptor 3	P49682	1374	CPNQRGLQRQPSRRD	Homo sapiens
864	753	CXC Chemokine Receptor 4	P30991	1376	TEEMGSGDYDSMKEPC	Homo sapiens
865	753	CXC Chemokine Receptor 4	P30991	1377	KKLRSMTDKYRLHLSVAD	Homo sapiens
866	753	CXC Chemokine Receptor 4	P30991	1380	CIISKLSHSGHQKRAK	Homo sapiens
867	753	CXC Chemokine Receptor 4	P30991	1381	KLSKGKRGHSSVSTE	Homo sapiens
868	755	Complement Component 3a Receptor 1	AAC50657.1	25	ENRSLNIVQPPGEMNDRID	Homo sapiens
869	755	Complement Component 3a Receptor 1	AAC50657.1	26	KIPSGFPIEDHETSPDND	Homo sapiens
870	755	Complement Component 3a Receptor 1	AAC50657.1	27	RKKARQSIQGILEAAFSEE	Homo sapiens
871	755	Complement Component 3a Receptor 1	AAC50657.1	28	PQTFQRPSADSLPRGSARLT	Homo sapiens
872	758	Complement Component 5a Receptor 1	P21730	811	DUNTPVDKTSNTLVRPD	Homo sapiens
873	758	Complement Component 5a Receptor 1	P21730	812	CGVDYSHDKRRERA/VAIVRL	Homo sapiens
874	758	Complement Component 5a Receptor 1	P21730	813	CYTFILLRTWSRRATRSTK	Homo sapiens
875	758	Complement Component 5a Receptor 1	P21730	814	QGRLRKSLPSLLRNVLTE	Homo sapiens
876	767	Calcitonin Receptor-like Receptor	Q16602	841	AELEESPEDSIQLGVTR	Homo sapiens
877	767	Calcitonin Receptor-like Receptor	Q16602	843	EFVLIPWRPEGKIAEEV	Homo sapiens
878	767	Calcitonin Receptor-like Receptor	Q16602	844	RRNWNQYKIQFGNSFSNSE	Homo sapiens
879	767	Calcitonin Receptor-like Receptor	Q16602	845	RSASYVTSTISDGPYSHDC	Homo sapiens
880	832	Cannabinoid Receptor 1	AAB18200.1	29	NDIQYEDIKGDMAKLG	Homo sapiens
881	832	Cannabinoid Receptor 1	AAB18200.1	30	KENEENIQCGENFMIDIE	Homo sapiens
882	832	Cannabinoid Receptor 1	AAB18200.1	31	EDGKVQVTRPDQARMIDIR	Homo sapiens



883	832	Cannabinoid Receptor 1	AAB18200.1	32	CEGTAQPLDNSMGDSD	Homo sapiens
884	832	Cannabinoid Receptor 1	AAB18200.1	274	MKSILDGLADTFR	Homo sapiens
885	832	Cannabinoid Receptor 1	AAB18200.1	297	NKLSLFFKEENIQC	Homo sapiens
886	833	Cannabinoid Receptor 2	CAA52376.1	33	KDGLDSNPMKDVMIILSGPQK	Homo sapiens
887	833	Cannabinoid Receptor 2	CAA52376.1	34	QDRQVPGMARMRLDVR LAKT	Homo sapiens
888	833	Cannabinoid Receptor 2	CAA52376.1	35	KEAPRSSVTETADGK	Homo sapiens
889	833	Cannabinoid Receptor 2	CAA52376.1	36	RSGEIRSSAHCLAHWKCC	Homo sapiens
890	922	Leukocyte Antigen CD97	NP_001775.1	2644	GRDPPAKDVMPPGRQELLCC	Homo sapiens
891	922	Leukocyte Antigen CD97	NP_001775.1	2646	CSPGYEPVSGAKTFKN	Homo sapiens
892	922	Leukocyte Antigen CD97	NP_001775.1	2647	FSSFSEIITPTETC	Homo sapiens
893	922	Leukocyte Antigen CD97	NP_001775.1	2648	CRPGWKPRHGPNNQK	Homo sapiens
894	922	Leukocyte Antigen CD97	NP_001775.1	2649	DGEAGRDPPAKDVMPPGR	Homo sapiens
895	922	Leukocyte Antigen CD97	NP_001775.1	2650	ANASNLHSHKKQAELE	Homo sapiens
896	922	Leukocyte Antigen CD97	NP_001775.1	2651	RLSAVNSIFLSHNNTKE	Homo sapiens
897	922	Leukocyte Antigen CD97	NP_001775.1	2652	KLTQKFEINPDMKKL	Homo sapiens
898	922	Leukocyte Antigen CD97	NP_001775.1	2680	KLVDELMEAPGDVEAL	Homo sapiens
899	922	Leukocyte Antigen CD97	NP_001775.1	2681	RFFDKVQDLGRDSKTS	Homo sapiens
900	941	EMR1 Hormone Receptor	Q14246	1180	RAEYLDIESKVINKEC	Homo sapiens
901	941	EMR1 Hormone Receptor	Q14246	2675	CVMHSEWEGHIRPTRKPNK	Homo sapiens
902	941	EMR1 Hormone Receptor	Q14246	2677	CLNGQVREYKRWITGKTKP	Homo sapiens
903	941	EMR1 Hormone Receptor	Q14246	2678	CLNGQVREYKRWITGK	Homo sapiens
904	941	EMR1 Hormone Receptor	Q14246	2679	SGHLSCQGLKASCE	Homo sapiens
905	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1183	GTALANGTGELSEHQQ	Homo sapiens
906	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1184	ADSLUEVFNLHERWYD	Homo sapiens
907	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1185	VRAHRHRLRPRRQKA	Homo sapiens
908	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1186	DKLRLYIEQKTNLPALNRF	Homo sapiens
909	978	Cholecystokinin A Receptor	P32238	820	AKERKPSITSSGKYEDSDGC	Homo sapiens
910	978	Cholecystokinin A Receptor	P32238	821	CYLQKTRPPRKLELRQ	Homo sapiens
911	978	Cholecystokinin A Receptor	P32238	822	SANAWRAYDTASAERR	Homo sapiens
912	978	Cholecystokinin A Receptor	P32238	823	CPNPGPPGARGEVEEEE	Homo sapiens
913	1103	Corticotropin releasing factor Receptor 2	Q13324	453	CEPILDDKQRKYDLHYRIAL	Homo sapiens
914	1103	Corticotropin releasing factor Receptor 2	Q13324	502	QLVDHEVHESNEVWC	Homo sapiens

915	1103	factor Receptor 2	Q13324	505	DPEGPYSYCNITLDQIGTCW	Homo sapiens
916	1103	Corticotropin releasing factor Receptor 2	LR43	507	ALLEQYCHTIMLTNLG	Homo sapiens
917	1240	Dopamine Receptor D1	CAA41734.1	41	SSHHEPRGSISKEC	Homo sapiens
918	1240	Dopamine Receptor D1	CAA41734.1	42	KAKPTSPSDGNATSLAETID	Homo sapiens
919	1240	Dopamine Receptor D1	CAA41734.1	43	CSQPESSEFKMSFKRE	Homo sapiens
920	1240	Dopamine Receptor D1	CAA41734.1	44	EDLKKEEAAGIARPLEK	Homo sapiens
921	1241	Dopamine Receptor D5	P21918	1407	PWEEDFWEPDVNAENC	Homo sapiens
922	1241	Dopamine Receptor D5	P21918	1408	CAPDLSRASIKKETK	Homo sapiens
923	1241	Dopamine Receptor D5	P21918	1409	PNAVTPGNREVDNDEE	Homo sapiens
924	1241	Dopamine Receptor D5	P21918	1410	QTSPDGDPAESVWELDC	Homo sapiens
925	1242	Dopamine Receptor D2	P14416	1403	KRSSRAFRHLRAPLKGNC	Homo sapiens
926	1242	Dopamine Receptor D2	P14416	1404	CTVIMKSNSEFPVNRVRV	Homo sapiens
927	1242	Dopamine Receptor D2	P14416	1405	KPEKNHGAKOHPIAK	Homo sapiens
928	1242	Dopamine Receptor D2	P14416	1406	GKTRISLKTMSRRKLSQQKE	Homo sapiens
929	1243	Dopamine Receptor D3	P35462	1398	KQRRRKRLTRQNSQC	Homo sapiens
930	1243	Dopamine Receptor D3	P35462	1399	CNSVRPGFPQQTLSPDP	Homo sapiens
931	1243	Dopamine Receptor D3	P35462	1400	CQDTALGGPGFQERIGE	Homo sapiens
932	1243	Dopamine Receptor D3	P35462	1401	KREEKTRNSLSPTIAP	Homo sapiens
933	1243	Dopamine Receptor D3	P35462	1402	STSLKLGPLQPRGVPLRE	Homo sapiens
934	1244	Dopamine Receptor D4	P21917	1394	VAVAVPLRYNRQGGSR	Homo sapiens
935	1244	Dopamine Receptor D4	P21917	1395	EVARRAKLHGRAPRRP	Homo sapiens
936	1244	Dopamine Receptor D4	P21917	1396	PPSPTPPAPRLPQDPC	Homo sapiens
937	1244	Dopamine Receptor D4	P21917	1397	PPQTPPQTRRRRRRAKITGRE	Homo sapiens
938	1267	Opioid Receptor, delta 1 (OPRD1)	AAA18789.1	222	DAYPSAFPSAGANASGP	Homo sapiens
939	1267	Opioid Receptor, delta 1 (OPRD1)	AAA18789.1	224	LVDIRRDPLVVAALHLC	Homo sapiens
940	1267	Opioid Receptor, delta 1 (OPRD1)	AAA18789.1	225	KRCFRQLCRKPCGRPD	Homo sapiens
941	1267	Opioid Receptor, delta 1 (OPRD1)	AAA18789.1	226	SRPREATARERVATAC	Homo sapiens
942	1424	Duffy Antigen	AAC50055.1	1411	TENSSQLDFEDVWNSS	Homo sapiens
943	1424	Duffy Antigen	AAC50055.1	1412	NDSFPDGDYDANILEAAPC	Homo sapiens
944	1424	Duffy Antigen	AAC50055.1	1413	CHASLGHRLGAGQVPG	Homo sapiens

945	1424	Duffy Antigen	AAC50055.1	1415	FGAKGLKKALGMGPGP	Homo sapiens
946	1451	EBV-Induced Gene 2	AAA35924.1	45	KQEAERITCMEYPNFEET	Homo sapiens
947	1451	EBV-Induced Gene 2	AAA35924.1	46	KLFRTAKGNPLTEKSGVNKK	Homo sapiens
948	1451	EBV-Induced Gene 2	AAA35924.1	47	KSAPEENSREMITETQM	Homo sapiens
949	1451	EBV-Induced Gene 2	AAA35924.1	48	CKGYKRKVMRMLKRQ	Homo sapiens
950	1486	Endothelin B Receptor	BAA14398.1	54	GEERGFPDRATPLLQTAE	Homo sapiens
951	1486	Endothelin B Receptor	BAA14398.1	55	RS LAPAEVPGKDRIAGSP	Homo sapiens
952	1486	Endothelin B Receptor	BAA14398.1	56	PTISPPPCQGGPIEKE	Homo sapiens
953	1486	Endothelin B Receptor	BAA14398.1	57	EEKQSLEEKQSLCKFKAND	Homo sapiens
954	1488	Endothelin A Receptor	AAB25530.1	49	RYSNLSNHVDDFTFRGTE	Homo sapiens
955	1488	Endothelin A Receptor	AAB25530.1	50	NRRNGSLRIALSEHLK	Homo sapiens
956	1488	Endothelin A Receptor	AAB25530.1	51	EYRGEQHKTCMLNATSK	Homo sapiens
957	1488	Endothelin A Receptor	AAB25530.1	53	KNHDQNNHNIDRSSHKD	Homo sapiens
958	1598	Calcium-Sensing Receptor (CASR)	P41180	1425	RPGIEKFREEAEERDIC	Homo sapiens
959	1598	Calcium-Sensing Receptor (CASR)	P41180	1426	CHLQEGAKGPLPVDIFLR	Homo sapiens
960	1598	Calcium-Sensing Receptor (CASR)	P41180	1427	GHEESGDRFSNSTAFRLPLC	Homo sapiens
961	1598	Calcium-Sensing Receptor (CASR)	P41180	1428	KGIIEGEPTCCFECVECPDG	Homo sapiens
962	1598	Calcium-Sensing Receptor (CASR)	P41180	1429	CSTAAHAFKVAARATLRNSN	Homo sapiens
963	1598	Calcium-Sensing Receptor (CASR)	P41180	1430	PQKNAMAHNRNTHQNSLE	Homo sapiens
964	1598	Calcium-Sensing Receptor (CASR)	P41180	1431	RPEVEDPEELSPALVVSSSQ	Homo sapiens
965	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1878	ASWGGTPEERLKVAITMLTA	Homo sapiens
966	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1879	SEDSAPTNDIAANSAS	Homo sapiens
967	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1880	SVESAGYTVLRILPLVL	Homo sapiens
968	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1881	PVFLFLITVTIPNGD	Homo sapiens
969	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	2612	EERLKVAITMLTARGIIRFV	Homo sapiens
970	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	2613	ERALSEDSAPTNDIAANSAS	Homo sapiens



991	1762	Galanin Receptor GalR1	AAA50767.1	194	KKLKNMSKKSEASKKTAQ	Homo sapiens
992	1762	Galanin Receptor GalR1	AAA50767.1	195	GNSLVTVLARSKP	Homo sapiens
993	1762	Galanin Receptor GalR1	AAA50767.1	196	RKDSHLSDTKENKSRID	Homo sapiens
994	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1250	QTAGELYQRWERYRREC	Homo sapiens
995	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1251	CENPEKNEAFDQRILER	Homo sapiens
996	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1253	CRLRSLGEEQRQLPERAFR	Homo sapiens
997	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1276	PTSRGLSSGTLPGPGNEA	Homo sapiens
998	1813	Gastrin-Releasing Peptide Receptor	P30550	829	CNISSHSADLPVNDWHPG	Homo sapiens
999	1813	Gastrin-Releasing Peptide Receptor	P30550	830	SDLHPFHEESTNQTFSC	Homo sapiens
1000	1813	Gastrin-Releasing Peptide Receptor	P30550	831	YNLPVEGNIHVKKQIES	Homo sapiens
1001	1813	Gastrin-Releasing Peptide Receptor	P30550	832	CQPGLIIRSHSTGRSTT	Homo sapiens
1002	1814	Cholecystokinin B Receptor	Q16144	1281	CEPRIRGAGTRELEAIR	Homo sapiens
1003	1814	Cholecystokinin B Receptor	Q16144	1282	RVRNQGGLPGAVHQNGRC	Homo sapiens
1004	1814	Cholecystokinin B Receptor	Q16144	1283	LRFDGSDSDSQSRVR	Homo sapiens
1005	1814	Cholecystokinin B Receptor	Q16144	1284	CRPETGAVGKDSGCV	Homo sapiens
1006	1834	Glucagon Receptor	P47871	837	DGLLRTRYSGKIGDDL	Homo sapiens
1007	1834	Glucagon Receptor	P47871	838	CGPDGQWVRGPRGQWRDAS	Homo sapiens
1008	1834	Glucagon Receptor	P47871	839	CQMDGEEIEVQKEVAKMYSS	Homo sapiens
1009	1834	Glucagon Receptor	P47871	840	TSNHRASSSPGHGPPSKE	Homo sapiens
1010	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	206	KLQKWTQKKEKGKLSRMK	Homo sapiens
1011	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	207	DRSLAIRPLALKNSKVGQ	Homo sapiens
1012	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	208	RMIHLADSSGQTKVFSQC	Homo sapiens
1013	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	209	DPHELQLNGSKNNIPRARLK	Homo sapiens
1014	1945	Opsin, green-sensitive	NP_000504.1	1746	QRLAGRHPQDSYEDSTQSS	Homo sapiens
1015	1945	Opsin, green-sensitive	NP_000504.1	1747	CKPFGNVRFDKLAIVG	Homo sapiens
1016	1945	Opsin, green-sensitive	NP_000504.1	1748	KTSCGPDVFGSSYPGVQS	Homo sapiens

1017	1945	Opsin, green-sensitive	NP_000504.1	1750	CILQLFGKKVDDGSELSS	Homo sapiens
1018	1945	Opsin, green-sensitive	NP_000504.1	1767	STRGPFEGPNYHIAPR	Homo sapiens
1019	1945	Opsin, green-sensitive	NP_000504.1	1768	TNGLVLAATMKFKLRL	Homo sapiens
1020	1945	Opsin, green-sensitive	NP_000504.1	1769	ELSSASKTEVSSVSSVSP	Homo sapiens
1021	1951	Growth Hormone	Q92847	581	ADLDWDASPGNDSLGD	Homo sapiens
1022	1951	Secretagogue Receptor	Q92847	582	GVEHENGTDPWDINEC	Homo sapiens
1023	1951	Secretagogue Receptor	Q92847	583	KLWRRRRRGDAVVGASL	Homo sapiens
1024	1951	Secretagogue Receptor	Q92847	584	SQRKLSTLKDESSRAW	Homo sapiens
1025	1954	Secretagogue Receptor	Q02643	833	REDESACLQAAEEMPNTILG	Homo sapiens
1026	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	834	CPDFFSHFSSES GAVKRD	Homo sapiens
1027	1954	Hormone Receptor	Q02643	835	VRKLEPAQGS LHTQSQ	Homo sapiens
1028	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	836	RTEISRKVWHGHDPPELL	Homo sapiens
1029	2120	Histamine H1 Receptor	P35367	1167	GWNHFMQQTSVRREDKC	Homo sapiens
1030	2120	Histamine H1 Receptor	P35367	1168	CQRELINRSLPSFSEIKLR	Homo sapiens
1031	2120	Histamine H1 Receptor	P35367	1169	AGGGSVLKSPSQTPKE	Homo sapiens
1032	2120	Histamine H1 Receptor	P35367	1170	KSPVVFSEQEDDREVDKLYC	Homo sapiens
1033	2120	Histamine H1 Receptor	P35367	1171	TAPGKGKLRSGSNTGLD	Homo sapiens
1034	2120	Histamine H1 Receptor	P35367	1172	KRLRSHSRQVVSGLHMNRE	Homo sapiens
1035	2121	Histamine H2 Receptor	P25021	1173	NSRNETSKGNHTSKC	Homo sapiens
1036	2121	Histamine H2 Receptor	P25021	1174	CITYYRIFKVARDDQAKR	Homo sapiens
1037	2121	Histamine H2 Receptor	P25021	1175	RDQAKRINHSSWKAA	Homo sapiens
1038	2121	Histamine H2 Receptor	P25021	1176	TAFVYRGLRGDDAINE	Homo sapiens
1039	2121	Histamine H2 Receptor	P25021	1177	HKTSLSNASQLSRTQSRE	Homo sapiens
1040	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	227	DSNGSAGSEDAQLEPA	Homo sapiens
1041	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	228	KVREDVDVIECSLQFPDD	Homo sapiens
1042	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	229	RNTVQDPAYLRDIDGMNK	Homo sapiens
1043	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	230	CFPLKMRMERQSTSRVRN	Homo sapiens

1044	2964	(OPRK1) Luteinizing Hormone/Choriogonadotropin Receptor	Q14751	1432	CNTGIRKFPDVTKVFSSEN	Homo sapiens
1045	2964	Luteinizing Hormone/Choriogonadotropin Receptor	Q14751	1433	KMHNGAFRGATGPKILD	Homo sapiens
1046	2964	Luteinizing Hormone/Choriogonadotropin Receptor	Q14751	1434	CESTVRKVSNIKLYSS	Homo sapiens
1047	2964	Luteinizing Hormone/Choriogonadotropin Receptor	Q14751	1435	FAVRNPELMATNKDTK	Homo sapiens
1048	2964	Luteinizing Hormone/Choriogonadotropin Receptor	Q14751	1436	CKRRAELYRRKDFSAYTSN	Homo sapiens
1049	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	210	ERHITVFRMQLHTRMSNRR	Homo sapiens
1050	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	211	RQRTMRMSRHHSSGPRRNRD	Homo sapiens
1051	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	212	KHLATEWNTVSKLVM	Homo sapiens
1052	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	213	ENPTGPTESDRSASSLN	Homo sapiens
1053	3038	G Protein-Coupled Receptor MRG	AAB21255.1	184	ESQISLSCSLCHSGDQEAQ	Homo sapiens
1054	3038	G Protein-Coupled Receptor MRG	AAB21255.1	185	QQQKATRVYAVVQISAPM	Homo sapiens
1055	3038	G Protein-Coupled Receptor MRG	AAB21255.1	186	DKPEVGRNKKAAAGIDPME	Homo sapiens
1056	3038	G Protein-Coupled Receptor MRG	AAB21255.1	187	EQPHSTQHVENLLPREHRVD	Homo sapiens
1057	3057	Melanocortin 3 Receptor (MC3R)	P41968	451	RLHVKRIAALPPADGVAPQ	Homo sapiens
1058	3057	Melanocortin 3 Receptor (MC3R)	P41968	452	DPLIYAFRSLELRNTFRE	Homo sapiens
1059	3057	Melanocortin 3 Receptor (MC3R)	P41968	562	QAPFFSNQSSSAFCEQVFI	Homo sapiens
1060	3057	Melanocortin 3 Receptor (MC3R)	P41968	563	IVHSDYLIFEDQFIQHMDNI	Homo sapiens

1061	3058	(MC3R)	Melanocortin 4 Receptor	AAB33341.1	1032	HSNASESLGKGYSDGGC	Homo sapiens
1062	3058	(MC4R)	Melanocortin 4 Receptor	AAB33341.1	1033	KRIAVLPGTGAIKQGA	Homo sapiens
1063	3058	(MC4R)	Melanocortin 4 Receptor	AAB33341.1	1035	NSTDIDAQSFTVNIDN	Homo sapiens
1064	3058	(MC4R)	Melanocortin 4 Receptor	AAB33341.1	1469	NSTHRGMHTSLHLWNRSSYR	Homo sapiens
1065	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1022	ATEGNLSGPNVKNKSSPC	Homo sapiens
1066	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1024	NKHLVIADAFVRHIDN	Homo sapiens
1067	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1025	MNSSFHLHFLDLNLNAT	Homo sapiens
1068	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1026	RYHHIMTARRSGAIIAG	Homo sapiens
1069	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1036	QGSQRRLLGSLNSTPT	Homo sapiens
1070	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1038	EAGALVARAAVLQQLD	Homo sapiens
1071	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1039	ALRYHSIVTLPRARQA	Homo sapiens
1072	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1040	CQHAQGIARLHKRQRP	Homo sapiens
1073	3079	Melatonin Receptor type 1a	AAB17720.1	214	HSUKYDKLYSSKNSLC	Homo sapiens	
1074	3079	Melatonin Receptor type 1a	AAB17720.1	215	CTARVFFVDSSNDVADR	Homo sapiens	
1075	3079	Melatonin Receptor type 1a	AAB17720.1	216	QVRQRVKPDRKPKLKP	Homo sapiens	
1076	3079	Melatonin Receptor type 1a	AAB17720.1	217	DSSNDVADRVKWKPSPLMTN	Homo sapiens	
1077	3080	Melatonin Receptor type 1b	P49286	930	AVRPGWSGAGSARPSR	Homo sapiens	
1078	3080	Melatonin Receptor type 1b	P49286	931	LVAIFYDGGWALGEEHC	Homo sapiens	
1079	3080	Melatonin Receptor type 1b	P49286	932	LVLQARRKAKPESRLC	Homo sapiens	
1080	3080	Melatonin Receptor type 1b	P49286	933	CIQDASKGSHAEGLQSPA	Homo sapiens	
1081	3080	Melatonin Receptor type 1b	P49286	934	QEMAPQIPEGLFVTSY	Homo sapiens	
1082	3081	Melatonin-Related Receptor	Q13585	751	LAARDPAGQNPDNQLAE	Homo sapiens	
1083	3081	Melatonin-Related Receptor	Q13585	752	ARARAHARDQAREQDRAHAC	Homo sapiens	
1084	3081	Melatonin-Related Receptor	Q13585	753	DRASGHPKPHSRSSAY	Homo sapiens	
1085	3081	Melatonin-Related Receptor	Q13585	754	HPKPAAADNPELSASHC	Homo sapiens	



1086	3081	Melatonin-Related Receptor	Q13585	755	DDSDLPESASSPAAGPT	Homo sapiens
1087	3093	Metabotropic Glutamate Receptor 1	Q13255	879	DDYKIQMNKSGVVRVC	Homo sapiens
1088	3093	Metabotropic Glutamate Receptor 1	Q13255	880	CRSNTFLNIFRRKKAG	Homo sapiens
1089	3093	Metabotropic Glutamate Receptor 1	Q13255	881	DTSTKILYNVEEEDA	Homo sapiens
1090	3093	Metabotropic Glutamate Receptor 1	Q13255	882	ERFKLLQEWVEHERE	Homo sapiens
1091	3094	Metabotropic Glutamate Receptor 2	Q14416	891	DFVRASLSRGADGSRHIC	Homo sapiens
1092	3094	Metabotropic Glutamate Receptor 2	Q14416	892	CVATSEKVGGRAMSRAAFEG	Homo sapiens
1093	3094	Metabotropic Glutamate Receptor 2	Q14416	893	CAAHSLRAVPFEQESK	Homo sapiens
1094	3094	Metabotropic Glutamate Receptor 2	Q14416	894	CDAMRPVNGRRLYKDF	Homo sapiens
1095	3094	Metabotropic Glutamate Receptor 2	Q14416	895	DAPFRPADTHNEVRFDR	Homo sapiens
1096	3094	Metabotropic Glutamate Receptor 2	Q14416	896	GKETAPERREVVTLRC	Homo sapiens
1097	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	897	GGLFPINEKGTGTEEC	Homo sapiens
1098	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	898	EFVRASLTIVDEAEYMC	Homo sapiens
1099	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	899	RSNIKSYDSVIRELL	Homo sapiens
1100	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	900	CDKHLAIDSSNVEQES	Homo sapiens
1101	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	902	GTRRYTLAEKRETVILKC	Homo sapiens
1102	3096	Metabotropic Glutamate Receptor 4	Q14833	909	PSSLGKPKGHPHMINIRID	Homo sapiens
1103	3096	Metabotropic Glutamate Receptor 4	Q14833	910	CGSGGPIITKPERVWG	Homo sapiens
1104	3096	Metabotropic Glutamate Receptor 4	Q14833	911	CKLSRHALKKGSHVKK	Homo sapiens
1105	3096	Metabotropic Glutamate Receptor 4	Q14833	913	CPRMDPVDGTQLLKYI	Homo sapiens

1106	3096	Metabotropic Glutamate Receptor 4	Q14833	914	RIERMHWP GSGQLPR SIC	Homo sapiens
1107	3097	Metabotropic Glutamate Receptor 5	P41594	883	KDYFDYIN VGSWDNGEL	Homo sapiens
1108	3097	Metabotropic Glutamate Receptor 5	P41594	884	KMDDDEVW SKKSNIR SVC	Homo sapiens
1109	3097	Metabotropic Glutamate Receptor 5	P41594	885	GETLRYKDRRLAQHKSEIC	Homo sapiens
1110	3097	Metabotropic Glutamate Receptor 5	P41594	886	NPNQTA VIKPFPKSTE	Homo sapiens
1111	3097	Metabotropic Glutamate Receptor 5	P41594	887	KALYDVAEAE EHPAPA	Homo sapiens
1112	3097	Metabotropic Glutamate Receptor 5	P41594	888	RSPSPISL SHRAGSASRTD	Homo sapiens
1113	3097	Metabotropic Glutamate Receptor 5	P41594	889	RESPAAGPEAAA AKPD	Homo sapiens
1114	3098	Metabotropic Glutamate Receptor 6	O15303	903	QALIRGRGDG DEVGVRC	Homo sapiens
1115	3098	Metabotropic Glutamate Receptor 6	O15303	904	KLTSSTGTSDDSTRKC	Homo sapiens
1116	3098	Metabotropic Glutamate Receptor 6	O15303	905	DVEALQWSGDPHEVPSSLC	Homo sapiens
1117	3098	Metabotropic Glutamate Receptor 6	O15303	906	RFQVDEFTCEACPGDM	Homo sapiens
1118	3098	Metabotropic Glutamate Receptor 6	O15303	907	GARPPHSVIDYEEQRT	Homo sapiens
1119	3099	Metabotropic Glutamate Receptor 7	Q14831	917	CIAQSVRIPQERKDRITDFD	Homo sapiens
1120	3099	Metabotropic Glutamate Receptor 7	Q14831	918	NDEDIKQILAAAKRAD	Homo sapiens
1121	3099	Metabotropic Glutamate Receptor 7	Q14831	921	NIEDMQWGKG VREIPASVC	Homo sapiens
1122	3099	Metabotropic Glutamate Receptor 7	Q14831	2693	IKQLLDTPNRAVVI	Homo sapiens
1123	3099	Metabotropic Glutamate Receptor 7	Q14831	2694	DPPNIIDYDEHKTM	Homo sapiens
1124	3100	Metabotropic Glutamate Receptor 8	O00222	922	CANGDPPIFTKPKIS	Homo sapiens
1125	3100	Metabotropic Glutamate	O00222	923	CPRMSTIDGKELGYIRA	Homo sapiens

1126	3100	Receptor 8			924	KVEDMQWAHREHTHPASVC	Homo sapiens
1127	3100	Metabotropic Glutamate Receptor 8	O00222		925	CESLETNISSTKITYSYS	Homo sapiens
1128	3100	Metabotropic Glutamate Receptor 8	O00222		1894	KFYWILTMQRTHSQEVASH	Homo sapiens
1129	3212	Opioid mu-type Receptor	AAA20580.1		231	DGNLSDPCGPNRTNGLGRDS	Homo sapiens
1130	3212	Opioid mu-type Receptor	AAA20580.1		232	DRTNHQLENLEAETAPLP	Homo sapiens
1131	3212	Opioid mu-type Receptor	AAA20580.1		233	IKALVIPETTFQTVS	Homo sapiens
1132	3212	Opioid mu-type Receptor	AAA20580.1		234	RIRQNTRDHPSTANTVDR	Homo sapiens
1133	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1		1325	SERSQPGAEGSPETPPGRC	Homo sapiens
1134	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1		1326	CRAPRLLQAYSWKEEE	Homo sapiens
1135	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1		1327	SSEGEPEGSEVVVKMP	Homo sapiens
1136	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1		1328	KQPPRSSPNTVKRPTKKGRD	Homo sapiens
1137	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1		1329	CRWDKRRWRKIPKRP GS	Homo sapiens
1138	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1		1330	EHNKIQNGKAPRDPVTENC	Homo sapiens
1139	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1		1331	DSTSVSAVASNMIRDDE	Homo sapiens
1140	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1		1332	ENTVSTSLGHSKDENSQJIC	Homo sapiens
1141	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1		1333	DEKQNIIVARKIVKMTK	Homo sapiens
1142	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1		1831	RIKKDKKEPVANQDPVPSL	Homo sapiens
1143	3226	Muscarinic acetylcholine Receptor M4	AAA51571.1		218	SRSRVHKHRPEGPKEKKAKT	Homo sapiens
1144	3226	Muscarinic acetylcholine Receptor M4	AAA51571.1		219	KKPRPGGRPGGLRNGKLEEA	Homo sapiens
1145	3226	Muscarinic acetylcholine Receptor M4	AAA51571.1		220	DKDTSNESSSGSATQNTKER	Homo sapiens
1146	3226	Muscarinic acetylcholine Receptor M4	AAA51571.1		221	RPAANVARKFASIRNQVRK	Homo sapiens

1147	3227	Muscarinic Acetylcholine Receptor M5	P08912	1334	KAEKRKPAHRLFRSC	Homo sapiens
1148	3227	Muscarinic Acetylcholine Receptor M5	P08912	1335	CSSYPSEDEDKPAID	Homo sapiens
1149	3227	Muscarinic Acetylcholine Receptor M5	P08912	1336	KESPGEEFSAEETETEV	Homo sapiens
1150	3227	Muscarinic Acetylcholine Receptor M5	P08912	1337	KFRLVVKADGNQETNNGC	Homo sapiens
1151	3227	Muscarinic Acetylcholine Receptor M5	P08912	1338	KEPSTKGLNPNPSHQM	Homo sapiens
1152	3378	Tachykinin Receptor 3	NP_001050.1	1757	PAAETWIDGGGVGAD	Homo sapiens
1153	3378	Tachykinin Receptor 3	NP_001050.1	1759	PSQPWANLNGFVQPSWR	Homo sapiens
1154	3378	Tachykinin Receptor 3	NP_001050.1	1760	SRKKRATRPDPFNGC	Homo sapiens
1155	3378	Tachykinin Receptor 3	NP_001050.1	2265	ADAVNLTAALAGAA	Homo sapiens
1156	3378	Tachykinin Receptor 3	NP_001050.1	2290	SPSALGLPVASAPSQP	Homo sapiens
1157	3380	Neuromedin B Receptor	P28336	824	ERDFLPASDGTITELVIRC	Homo sapiens
1158	3380	Neuromedin B Receptor	P28336	825	KTUUKSAHNLPGEYNE	Homo sapiens
1159	3380	Neuromedin B Receptor	P28336	826	SEVARISLNDNSSFTAC	Homo sapiens
1160	3380	Neuromedin B Receptor	P28336	828	CGRKSYQERGTSYLLSSA	Homo sapiens
1161	3404	Neuropeptide Y Receptor Type 2	P49146	1057	RGELVPDPEPELIDST	Homo sapiens
1162	3404	Neuropeptide Y Receptor Type 2	P49146	1058	CIVYHLESKISKIRISF	Homo sapiens
1163	3404	Neuropeptide Y Receptor Type 2	P49146	1059	REYSLEIIPDFEIVAC	Homo sapiens
1164	3404	Neuropeptide Y Receptor Type 2	P49146	1060	NDHYHQRRQKTKMLVC	Homo sapiens
1165	3404	Neuropeptide Y Receptor Type 2	P49146	1061	CEQRDLAIHSEVSVTFKAKK	Homo sapiens
1166	3404	Neuropeptide Y Receptor Type 2	P49146	2297	MGPIGAEDENQITVEEMKVE	Homo sapiens
1167	3404	Neuropeptide Y Receptor Type 2	P49146	2298	SEVSVTFKAKKNLEVRKNSG	Homo sapiens
1168	3405	Neuropeptide Y Receptor Type 4	P50391	1068	CVTVRQKEKANVTNLL	Homo sapiens
1169	3405	Neuropeptide Y Receptor Type 4	P50391	1069	KNHSALEFLADKWC	Homo sapiens
1170	3405	Neuropeptide Y Receptor Type 4	P50391	1070	CYARIYRRLQRGGRVFKG	Homo sapiens

1171	3405	Type 4	Neuropeptide Y Receptor	P50391	1071	CQQSAPLESEHLPLST	Homo sapiens
1172	3405	Type 4	Neuropeptide Y Receptor	P50391	2275	SEHCQDSVDVMVFVTS	Homo sapiens
1173	3406	Type 4	Neuropeptide Y Receptor	Q15761	1072	MKKRNQKTTVNFLGN	Homo sapiens
1174	3406	Type 5	Neuropeptide Y Receptor	Q15761	1073	CGLSNKENRLEENEMI	Homo sapiens
1175	3406	Type 5	Neuropeptide Y Receptor	Q15761	1074	NLTILHPSKSGPQVKL	Homo sapiens
1176	3406	Type 5	Neuropeptide Y Receptor	Q15761	1075	SFIKKHRRRYSKKTAC	Homo sapiens
1177	3406	Type 5	Neuropeptide Y Receptor	Q15761	1076	PERPSQENIHSRLPEN	Homo sapiens
1178	3406	Type 5	Neuropeptide Y Receptor	Q15761	1077	CFEIKPEENSVDVHEL RV	Homo sapiens
1179	3408	Neurotensin Receptor Type 1	Neurotensin Receptor Type	P30989	935	RVLAAPSSSELDVNTDIYS	Homo sapiens
1180	3408	Neurotensin Receptor Type 1	Neurotensin Receptor Type	P30989	936	CHPFKAKTLMRSRTKK	Homo sapiens
1181	3408	Neurotensin Receptor Type 1	Neurotensin Receptor Type	P30989	937	GEQNRSDAGQHAGGLVC	Homo sapiens
1182	3408	Neurotensin Receptor Type 1	Neurotensin Receptor Type	P30989	938	RQAAEQGGQVCTVGGEHS	Homo sapiens
1183	3408	Neurotensin Receptor Type 1	Neurotensin Receptor Type	P30989	939	CPVWRRRRRKRPAFSRKADS	Homo sapiens
1184	3452	Opiate Receptor-Like 1 (OPRL1)	Opiate Receptor-Like 1	P41146	940	CHPIRALDVRTSSKAQA	Homo sapiens
1185	3452	Opiate Receptor-Like 1 (OPRL1)	Opiate Receptor-Like 1	P41146	941	PVAIMGSAQVEDEIEC	Homo sapiens
1186	3452	Opiate Receptor-Like 1 (OPRL1)	Opiate Receptor-Like 1	P41146	942	GVQPSSETAVAILRFC	Homo sapiens
1187	3452	Opiate Receptor-Like 1 (OPRL1)	Opiate Receptor-Like 1	P41146	943	CASALRRDVQVSDRVRSIAK	Homo sapiens
1188	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	Ocular Albinism 1	NP_000264.1	2123	TPEPRPTQPMASPRLGTFC	Homo sapiens
1189	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	Ocular Albinism 1	NP_000264.1	2124	TAVASLLKGRQGIYTE	Homo sapiens

1190	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2125	EMQTDINGGSLKPVRTAAK	Homo sapiens
1191	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2126	CSLGFQSPRKEIQWES	Homo sapiens
1192	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2127	SEGSDASTIEHTASESC	Homo sapiens
1193	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2128	NPASGKVSQVGGQTSD	Homo sapiens
1194	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1486	CKKLHPLKAGNDLDIRIK	Homo sapiens
1195	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1500	KIVKPLWTSFIQSVSYSKLL	Homo sapiens
1196	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1502	TAITKKIFKSHLKSSRNSTS	Homo sapiens
1197	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1503	VKKSSRNIFSVFVFFVC	Homo sapiens
1198	3582	Oxytocin Receptor	CAA46097.1	244	AEGNRTAGPPRRNEALARVE	Homo sapiens
1199	3582	Oxytocin Receptor	CAA46097.1	245	RLAVLATWLGCLVASAP	Homo sapiens
1200	3582	Oxytocin Receptor	CAA46097.1	246	PEGAAAGDGGRRVALAR	Homo sapiens
1201	3582	Oxytocin Receptor	CAA46097.1	247	YLGRRRLGETSASKKSNSS	Homo sapiens
1202	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	854	MQRIGDVLGSSDFRR	Homo sapiens
1203	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	855	ARGGRVTCHDTSAPEL	Homo sapiens
1204	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	856	KPAYGTSGLPRAKPK	Homo sapiens
1205	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	857	TGSPATPARRRLGLRRSD	Homo sapiens
1206	3595	Purinergic Receptor P2Y1	CAA07339.1	386	RYSGVVYPLKSLGRLKKN	Homo sapiens
1207	3595	Purinergic Receptor P2Y1	CAA07339.1	387	SGTGVRKNKTTTCYD	Homo sapiens
1208	3595	Purinergic Receptor P2Y1	CAA07339.1	388	RALYKDLNPLRRKS	Homo sapiens
1209	3595	Purinergic Receptor P2Y1	CAA07339.1	389	DTFRRLSRATRKASRSE	Homo sapiens
1210	3596	Purinergic Receptor P2Y5	P43657	850	FVQSTHSQGNINASEAC	Homo sapiens
1211	3596	Purinergic Receptor P2Y5	P43657	851	MVLKTLTKPVTLSRSKI	Homo sapiens
1212	3596	Purinergic Receptor P2Y5	P43657	852	TIGNSIKMKWNWSVRSD	Homo sapiens
1213	3596	Purinergic Receptor P2Y5	P43657	853	SEVHGAENFIQHNLQTLK	Homo sapiens
1214	3597	Purinergic Receptor P2Y6	Q15077	874	CTSRRLTRTAVVTLN	Homo sapiens
1215	3597	Purinergic Receptor P2Y6	Q15077	875	AQERRGKAARMAVVV	Homo sapiens

1216	3597	Purinergic Receptor P2Y6	Q15077	876	TKAYLAVRSTPGVPC	Homo sapiens
1217	3597	Purinergic Receptor P2Y6	Q15077	877	KKFRRRPHELLQKLAK	Homo sapiens
1218	3597	Purinergic Receptor P2Y6	Q15077	2726	CHPLAPWHKRGGRRAAW	Homo sapiens
1219	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	870	CFRMKMRSETAIFITN	Homo sapiens
1220	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	871	RTLKRPATLSQIGTNKK	Homo sapiens
1221	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	872	ESFQKSFYINAHIRMES	Homo sapiens
1222	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	873	KTETPLTIKPSLPAIQEE	Homo sapiens
1223	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	1895	SSLRPRLGNATANNTCIVD	Homo sapiens
1224	3638	Parathyroid Hormone Receptor 2 (PTHr2)	AAC50157.1	248	KAKVQCELNITAGLQEGE	Homo sapiens
1225	3638	Parathyroid Hormone Receptor 2 (PTHr2)	AAC50157.1	249	ESLIMQDDPQNSIEATSVDK	Homo sapiens
1226	3638	Parathyroid Hormone Receptor 2 (PTHr2)	AAC50157.1	250	NSEQDCLPHSFHEETKE	Homo sapiens
1227	3638	Parathyroid Hormone Receptor 2 (PTHr2)	AAC50157.1	251	EETKEDSGRQGGDDILMEKPS	Homo sapiens
1228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Q03431	761	CEKRLKEVLQRPASIMESDK	Homo sapiens
1229	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Q03431	762	ESEEDKEAPTGSRYRGRPC	Homo sapiens
1230	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Q03431	763	LYSGATLDEAERLITEELR	Homo sapiens
1231	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Q03431	765	KDDGFLNGSCSGLDEEASG	Homo sapiens
1232	3732	PACAP Receptor Type 1	P41586	944	CLEKIQRANELMGFNDSS	Homo sapiens
1233	3732	PACAP Receptor Type 1	P41586	945	CPELFRIFNPDQVWETET	Homo sapiens
1234	3732	PACAP Receptor Type 1	P41586	946	DSNSLDLSDMGVVSRC	Homo sapiens
1235	3732	PACAP Receptor Type 1	P41586	948	IKRKWRSWKVNRYFAVD	Homo sapiens
1236	3732	PACAP Receptor Type 1	P41586	2292	ESDFGDSNSLDLSDMGVVS	Homo sapiens
1237	3844	Apelin Receptor	AAA18954.1	62	RTTGDLNNTKVQC	Homo sapiens
1238	3844	Apelin Receptor	AAA18954.1	63	RSSREKRRSADIFAS	Homo sapiens
1239	3844	Apelin Receptor	AAA18954.1	64	QTIAGHFRKERIEGLRKRRR	Homo sapiens
1240	3844	Apelin Receptor	AAA18954.1	65	GPNMGKGGEGMHEKSIPIYSQ	Homo sapiens

1241	3845	Chemokine-Like Receptor 1 (CMKLR1)	LR39	447	RMEDEDYNTSISYGDEYPD	Homo sapiens
1242	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	448	DSIVVLEDLSPLEARVTR	Homo sapiens
1243	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	449	LTIVCKLHRNRLAKTKKPFK	Homo sapiens
1244	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	450	RSFTKMSSMINERTSMNERE	Homo sapiens
1245	3846	Spingolipid Receptor Edg1	AAA52336.1	1010	TRSRRLTRFNKISKASRSSE	Homo sapiens
1246	3846	Spingolipid Receptor Edg1	AAA52336.1	1011	CPSGDSAGKFKRPIIAG	Homo sapiens
1247	3846	Spingolipid Receptor Edg1	AAA52336.1	1012	CPSGDSAGKFKRPIIAGME	Homo sapiens
1248	3846	Spingolipid Receptor Edg1	AAA52336.1	1013	RSKSDNSSHPQKDEGD	Homo sapiens
1249	3847	Spingolipid Receptor Edg3	Q99500	1028	ERHLTMIKMRPYDANK	Homo sapiens
1250	3847	Spingolipid Receptor Edg3	Q99500	1029	LVKSSSRKVANHINSE	Homo sapiens
1251	3847	Spingolipid Receptor Edg3	Q99500	1030	SPKVKEIDPHIDPSSC	Homo sapiens
1252	3847	Spingolipid Receptor Edg3	Q99500	1031	CLVRGRGARASPIQPALD	Homo sapiens
1253	3847	Spingolipid Receptor Edg3	Q99500	1752	REHYQWVGKLAGRLKEASE	Homo sapiens
1254	3848	C-C Chemokine Receptor 9	P51686	958	RAHTWREKRLLYSKMVC	Homo sapiens
1255	3848	C-C Chemokine Receptor 9	P51686	959	KEESGIAICTMVPSDEST	Homo sapiens
1256	3848	C-C Chemokine Receptor 9	P51686	960	QAKKSSKHALKVTIT	Homo sapiens
1257	3848	C-C Chemokine Receptor 9	P51686	961	GERFRDLVTKLNLC	Homo sapiens
1258	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	74	ENYSYDLDYYSLESDLEEK	Homo sapiens
1259	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	75	RDTVEFNHITLCYNNFQKHD	Homo sapiens
1260	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	76	SKKFQARFRSSVAEILK	Homo sapiens
1261	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	77	GTVSEQLRNSETKNLC	Homo sapiens
1262	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1087	HPLRRRISRLSAYAV	Homo sapiens
1263	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1088	CEEFWGSQERQRQLYA	Homo sapiens
1264	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1089	SVRVSVKLRNRVWPGC	Homo sapiens
1265	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1090	CVTGSQADWDRARRRR	Homo sapiens
1266	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1091	DSFREELRKLVAWPRKIA	Homo sapiens



1267	3851	Receptor 10 (GPR10) G Protein-Coupled Receptor GPR12	AAA91630.1	78	GCISSLAQRRARSPSD	Homo sapiens
1268	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	79	ENISAAVSSRVPAVEPEPE	Homo sapiens
1269	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	307	STCSVVRPLTKNNAA	Homo sapiens
1270	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	308	QSEATKLVITGLIVAS	Homo sapiens
1271	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	84	KQKENECLGDYPEVLQE	Homo sapiens
1272	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	85	SMNNRTVQHGVITSL	Homo sapiens
1273	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	86	ETLKLYDFFPSCDMRKDLR	Homo sapiens
1274	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	87	GRSVHVDFFSSESQSRHGS	Homo sapiens
1275	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1511	CLKNYDFGSSTETSDSHLIK	Homo sapiens
1276	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1512	KALSTFIHAEDFARRRKRS	Homo sapiens
1277	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1612	ATSPNSDIRETHSHVP	Homo sapiens
1278	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1613	LMGALHFKPGSRRUD	Homo sapiens
1279	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1615	GLPTLLSRELTIDDKPYC	Homo sapiens
1280	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	93	DRYMAIVQPKYAKELKNIC	Homo sapiens
1281	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	94	KDPDKDSTPATCLKISD	Homo sapiens
1282	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	95	GRTSKLKPVKVEKSIR	Homo sapiens
1283	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	96	RNYLRSRLRRKSFSGSLR	Homo sapiens
1284	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	97	KVSREKAKKMIAASWIFD	Homo sapiens
1285	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	98	DGRTVRRITMINIVPRTKVK	Homo sapiens

1286	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	99	RRGMKETFCMSSMKC	Homo sapiens
1287	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	100	KTIITKDSIYDSFDREAKEKK	Homo sapiens
1288	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1152	ALLFSQDGGQREGQRRC	Homo sapiens
1289	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1153	SGDEEDAYSAPPELPC	Homo sapiens
1290	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1154	ALLDTADLLAARERC	Homo sapiens
1291	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1155	RLLRGSSPSGPQPRRG	Homo sapiens
1292	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	101	KSGRHHLSAGPHALTQ	Homo sapiens
1293	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	102	RTNASGLEVPLHFLFARLDE	Homo sapiens
1294	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	103	SRPGLLHQGRQRRVRAMQ	Homo sapiens
1295	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	104	GQHGEREPSSGDVVMHRSS	Homo sapiens
1296	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	105	SERQARFSSQSGETGEVQAC	Homo sapiens
1297	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	106	DPYTVRSKGPLNGC	Homo sapiens
1298	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	107	NSTLDGNQSSHPFCLL	Homo sapiens
1299	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	108	CASQTTANDPYTVRSK	Homo sapiens
1300	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	109	ENMQSESNTVRDDIDD	Homo sapiens
1301	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	111	RRAVKRHRERRERQKRVFRM	Homo sapiens
1302	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	112	TRQKFQKVLKSKMKKR	Homo sapiens
1303	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	113	DPKRNKKTFEIDEIREKR	Homo sapiens
1304	3860	G Protein-Coupled Receptor SLC/MCH1	AAH01736.1	1532	CAPGQGGRRWRLPQPAWVEG	Homo sapiens
1305	3860	G Protein-Coupled	AAH01736.1	1533	EASLLPTGPNASNTSDGPDN	Homo sapiens

1306	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1539	KGVGRAVGLGGSGCQATE	Homo sapiens
1307	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1565	RMITSSVAPASQSRSLRTKR	Homo sapiens
1308	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1567	RAVSNAGTAEERTESKG	Homo sapiens
1309	3861	Receptor SLC/MCH1 G Protein-Coupled	O00155	376	RGLQLPGGQDSQCCEEP	Homo sapiens
1310	3861	Receptor GPR25 G Protein-Coupled	O00155	377	CRISRLRRPPHVGRARRNS	Homo sapiens
1311	3861	Receptor GPR25 G Protein-Coupled	O00155	378	RTGRLARRISSASSLRDD	Homo sapiens
1312	3861	Receptor GPR25 G Protein-Coupled	O00155	483	DYSGLDGLEELELCPAGD	Homo sapiens
1313	3862	Receptor GPR25 G Protein-Coupled	AAB60402.1	118	TVYCLLGDAHSPLYT	Homo sapiens
1314	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	119	EGPTGPAAPLPSPKAWD	Homo sapiens
1315	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	120	HFAAVFCIGSAEMSL	Homo sapiens
1316	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	121	GLTCGVVYPLSKNH	Homo sapiens
1317	3863	Receptor GPR31 G Protein-Coupled	O00270	1157	REPEKQPKLQRAQALVTLV	Homo sapiens
1318	3863	Receptor GPR31 G Protein-Coupled	O00270	1158	CHSFYSRADGSGFSIIWQEA	Homo sapiens
1319	3863	Receptor GPR31 G Protein-Coupled	O00270	1159	QNLGSCRALCAVAHTSDVTG	Homo sapiens
1320	3863	Receptor GPR31 G Protein-Coupled	O00270	1160	SPTRSSYRRVFHTLRGKGQ	Homo sapiens
1321	3864	Receptor GPR31 G Protein-Coupled	AAA98457.1	143	DELFRDRYNHTCFEKFPEME	Homo sapiens
1322	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	144	LRAVRGSVSTERQEKAKIKR	Homo sapiens
1323	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	145	RSDVAKALHNLLRFLASDK	Homo sapiens
1324	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	146	NASLTLETPLTSKRNSTAK	Homo sapiens

1325	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	166	FQYLVPSVTSLLTVG	Homo sapiens
1326	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	167	CLAERAACSVVRPLARSH	Homo sapiens
1327	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	168	HLVYRICQVVRHAH	Homo sapiens
1328	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	169	EIQRALWLLCGCFQSK	Homo sapiens
1329	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	171	ATAESRRVAGRTYSAAR	Homo sapiens
1330	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	172	RIDDEQGRRCQCVLVFPQPE	Homo sapiens
1331	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	173	RIHAMIRLDShAKALERAKKR	Homo sapiens
1332	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	174	DASFRRLRQLITC	Homo sapiens
1333	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	175	NVSQDNGTGHNAITSEP	Homo sapiens
1334	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	176	RSRHMPWRTYRGAKVAS	Homo sapiens
1335	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	177	VLRSGAKALGKARRK	Homo sapiens
1336	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	178	LDNFRKNFRSLRC	Homo sapiens
1337	3869	G Protein-Coupled Receptor HM74	BAA01721.1	179	QDHFLEIDKKNCVFRDD	Homo sapiens
1338	3869	G Protein-Coupled Receptor HM74	BAA01721.1	180	ARIWSLRQRQMDRHAQIKR	Homo sapiens
1339	3869	G Protein-Coupled Receptor HM74	BAA01721.1	181	CLQRKMTGEPDNNRSTVE	Homo sapiens
1340	3869	G Protein-Coupled Receptor HM74	BAA01721.1	182	DPNKTGRGAPEALMANSGE	Homo sapiens
1341	3869	G Protein-Coupled Receptor HM74	BAA01721.1	183	SNNHKKGHCHQEPASLEKQ	Homo sapiens
1342	3869	G Protein-Coupled Receptor HM74	BAA01721.1	1453	RQRQMDRHAQIKRAITFIMV	Homo sapiens
1343	3869	G Protein-Coupled Receptor HM74	BAA01721.1	1454	SPSYLGPTSNNHKKKG	Homo sapiens
1344	3870	G Protein-Coupled	Q15743	1192	AVRRSHGTQSKRKDQI	Homo sapiens

1345	3870	Receptor OGR1	Q15743	1193	LMHEEVIEDENQHRVC	Homo sapiens
1346	3870	G Protein-Coupled Receptor OGR1	Q15743	1194	CFVSETTHRDLARLG	Homo sapiens
1347	3870	G Protein-Coupled Receptor OGR1	Q15743	1195	CSRTGRAREAYPLGAPEASG	Homo sapiens
1348	3921	Prostaglandin D2 Receptor	P43119	1188	CRMVRQQKRHQGSLGPRPRT	Homo sapiens
1349	3921	Prostaglandin D2 Receptor	P43119	1189	CFTQAVAPDSSEMGD	Homo sapiens
1350	3921	Prostaglandin D2 Receptor	P43119	1190	ASGRRDPRAPSPVKGEGSC	Homo sapiens
1351	3921	Prostaglandin D2 Receptor	P43119	1191	SAWGEGQVEPLPPTQQ	Homo sapiens
1352	3923	Prostaglandin D2 Receptor	Q13258	458	KSPFYRCQNTTSVEKGN SAV	Homo sapiens
1353	3923	Prostaglandin D2 Receptor	Q13258	459	RNLVAMHRRRLQRHPRSC	Homo sapiens
1354	3923	Prostaglandin D2 Receptor	Q13258	503	CAEPRADGREASPPLEEL	Homo sapiens
1355	3923	Prostaglandin D2 Receptor	Q13258	504	KDVKEKNRTSEEAEDLRALR	Homo sapiens
1356	3924	Prostaglandin E Receptor EP1	P34995	962	AQAAGRLRRRRSATTF	Homo sapiens
1357	3924	Prostaglandin E Receptor EP1	P34995	963	CVGVTRPLLHAARVSVARAR	Homo sapiens
1358	3924	Prostaglandin E Receptor EP1	P34995	964	CNTLSGLALHRARWRR	Homo sapiens
1359	3924	Prostaglandin E Receptor EP1	P34995	965	ASGPDSSRRRWGAHGPR	Homo sapiens
1360	3924	Prostaglandin E Receptor EP1	P34995	966	SGSARRARAHDMVMVGQ	Homo sapiens
1361	3925	Prostaglandin E Receptor EP2	AAD44177.1	967	IALALLARRWRGDVGC	Homo sapiens
1362	3925	Prostaglandin E Receptor EP2	AAD44177.1	968	CETRQWLPPGESPAISSV	Homo sapiens
1363	3925	Prostaglandin E Receptor EP2	AAD44177.1	969	GPSLGSGRGGPGARRRGE	Homo sapiens
1364	3925	Prostaglandin E Receptor EP2	AAD44177.1	971	NETSSRKEKWDLQALR	Homo sapiens
1365	3926	Prostaglandin E2 Receptor EP3	CAB52459.1	972	ERSAEARGNLTRPPGSGEDC	Homo sapiens
1366	3926	Prostaglandin E2 Receptor EP3	CAB52459.1	973	SRSYRRRESKRKKSFLLC	Homo sapiens
1367	3926	Prostaglandin E2 Receptor	CAB52459.1	974	CRAKATASQSSAQWGR	Homo sapiens

1368	3926	EP3	Prostaglandin E2 Receptor	CAB52459.1	975	KFCQVANAVSSCSNDGQ	Homo sapiens
1369	3927	EP3	Prostaglandin E Receptor	P35408	382	RLSDFRRRRSFRRIAGAE	Homo sapiens
1370	3927	EP4	Prostaglandin E Receptor	P35408	383	EREVSKNPDLQAIRIAS	Homo sapiens
1371	3927	EP4	Prostaglandin E Receptor	P35408	384	DSQRTSSAMSGHSRFSIRE	Homo sapiens
1372	3927	EP4	Prostaglandin E Receptor	P35408	385	RTLRISETSDSSQGQDSE	Homo sapiens
1373	3928	Receptor	Prostaglandin F2-alpha	P43088	1046	ILMKAYQRFQKSKAAS	Homo sapiens
1374	3928	Receptor	Prostaglandin F2-alpha	P43088	1047	ASDKEWIRFDQSNVLC	Homo sapiens
1375	3928	Receptor	Prostaglandin F2-alpha	P43088	1048	TKPIFHSTKITSKHVK	Homo sapiens
1376	3928	Receptor	Prostaglandin F2-alpha	P43088	1049	CFYNTEDIKDWDREY	Homo sapiens
1377	3928	Receptor	Prostaglandin F2-alpha	P43088	1050	RVKFKSQQHRQGRSHLE	Homo sapiens
1378	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	252	QGTNRSSKGRSLGKVDGTS	Homo sapiens
1379	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	253	QRYWVIVNPMGHSRKKAN	Homo sapiens
1380	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	255	SHDFRDHAKNALLCRSVR	Homo sapiens
1381	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	256	VSLTSKKHSRKSSYS	Homo sapiens
1382	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	257	ENDTNINLAKPTLPIKTR	Homo sapiens
1383	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	258	CPEESASHLVKKNATMG	Homo sapiens
1384	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	260	QPDITTCCHDVHNTCESSP	Homo sapiens
1385	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	261	MSKTRNHSTAYLTK	Homo sapiens
1386	4090	G Protein-Coupled Receptor GPR17	G Protein-Coupled Receptor GPR17	CAB08108.1	88	RDHKSGETPANVFLMH	Homo sapiens

1387	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	90	PSLRQGLRVEKRLTKAVR	Homo sapiens
1388	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	91	RSHGASCATQIRILALANR	Homo sapiens
1389	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	92	FEGKTNESSLSAKSE	Homo sapiens
1390	4254	Rhodopsin	P08100	1051	RNCMLTITCCGKNPLGD	Homo sapiens
1391	4254	Rhodopsin	P08100	1052	CGIDYYTLKPEVNNESFVI	Homo sapiens
1392	4254	Rhodopsin	P08100	1053	CWVPYASVAFYIFTHQGSN	Homo sapiens
1393	4254	Rhodopsin	P08100	1055	VLGGFTSLYLSLHGY	Homo sapiens
1394	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1042	ATSSLLRRWPYGSDDC	Homo sapiens
1395	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1043	CTLDYSKGDNRNFTSL	Homo sapiens
1396	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1044	MEQKLKSGHLQVNTT	Homo sapiens
1397	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1045	MVCRGIWQCLSPQKRE	Homo sapiens
1398	4321	Secretin Receptor	P47872	950	CLQELSEQTGDGLTEQ	Homo sapiens
1399	4321	Secretin Receptor	P47872	951	CPFLRLMLTSRNGSLFRN	Homo sapiens
1400	4321	Secretin Receptor	P47872	952	CGVNVNDSSNEKRHSY	Homo sapiens
1401	4321	Secretin Receptor	P47872	954	KDAVLFSSDDVTYCDAAH	Homo sapiens
1402	4321	Secretin Receptor	P47872	956	MRKLRTQETRGNEVSH	Homo sapiens
1403	4480	Somatostatin Receptor Type 1	P30872	994	EEPGRNASQNGTLSEG	Homo sapiens
1404	4480	Somatostatin Receptor Type 1	P30872	996	CLSWMDNAAEEPVDY	Homo sapiens
1405	4480	Somatostatin Receptor Type 1	P30872	997	EDFQPENLESGGVFRNGTC	Homo sapiens
1406	4480	Somatostatin Receptor Type 1	P30872	2616	LSVDAVNMFTSIYC	Homo sapiens
1407	4480	Somatostatin Receptor Type 1	P30872	2618	RAYSVEDFQPENLES	Homo sapiens
1408	4481	Somatostatin Receptor Type 2	P30874	998	RSNQWGRSSCTINWPGE	Homo sapiens
1409	4481	Somatostatin Receptor Type 2	P30874	999	KVKSSGIRVGSKKRKSE	Homo sapiens
1410	4481	Somatostatin Receptor Type	P30874	1000	CLVKVSGTDDGERSDS	Homo sapiens

2	1411	4481	Somatostatin Receptor Type P30874	1001	KQDKSRUNNETTETQRT	Homo sapiens
2	1412	4481	Somatostatin Receptor Type P30874	2276	DMADEPLNGSHTWLSIP	Homo sapiens
2	1413	4482	Somatostatin Receptor Type P32745	1002	KVRSAGRRVWAPSCQR	Homo sapiens
3	1414	4482	Somatostatin Receptor Type P32745	2622	REGGKGKEMNGRVSQL	Homo sapiens
3	1415	4482	Somatostatin Receptor Type P32745	2624	TTSEPENASSAWPPD	Homo sapiens
3	1416	4482	Somatostatin Receptor Type P32745	2626	QPGTSGQERPPSRVA	Homo sapiens
3	1417	4483	Somatostatin Receptor Type P31391	1007	IFADTRPARGGQAVAC	Homo sapiens
4	1418	4483	Somatostatin Receptor Type P31391	1008	CLLEGAGGAEELPDY	Homo sapiens
4	1419	4483	Somatostatin Receptor Type P31391	2627	KMRAVALRAGWQQRR	Homo sapiens
4	1420	4483	Somatostatin Receptor Type P31391	2631	CRAVLSVDGLNMFSTV	Homo sapiens
4	1421	4483	Somatostatin Receptor Type P31391	2633	CLVGLVGNALVIFVL	Homo sapiens
4	1422	4484	Somatostatin Receptor Type NP_001044.1	2637	SLPLLVFADVQEGGTC	Homo sapiens
5	1423	4484	Somatostatin Receptor Type NP_001044.1	2638	CLRKGSGAKDADATEP	Homo sapiens
5	1424	4484	Somatostatin Receptor Type NP_001044.1	2639	RIRQQQEATPPAHRAAA	Homo sapiens
5	1425	4484	Somatostatin Receptor Type NP_001044.1	2643	RVAKLASAAAWVLSLC	Homo sapiens
	1426	4552	Tachykinin Receptor 1 AAA36641.1	1339	CMIEWPEHPNKIYEV	Homo sapiens
	1427	4552	Tachykinin Receptor 1 AAA36641.1	1340	CPFISAGDYEGLMKSTRYL	Homo sapiens
	1428	4552	Tachykinin Receptor 1 AAA36641.1	1341	KVSRLETTISTVVGAAHEE	Homo sapiens
	1429	4552	Tachykinin Receptor 1 AAA36641.1	1342	EPEDGPKATPSSDLTSNC	Homo sapiens
	1430	4687	Thrombin Receptor P25116	1202	EDEEKNESGLTEYRLV	Homo sapiens
	1431	4687	Thrombin Receptor P25116	2582	AVANRSKKSRAFLSAAVFC	Homo sapiens
	1432	4687	Thrombin Receptor P25116	2583	SINKSSPLQKQLPAFISE	Homo sapiens



1433	4687	Thrombin Receptor	P25116	2621	DPRSELLRNPNDKYEPFWE	Homo sapiens
1434	4734	Thyrotropin Releasing Hormone Receptor	P34981	1196	PSDPKENSKTWKNDS	Homo sapiens
1435	4734	Thyrotropin Releasing Hormone Receptor	P34981	1197	CFNSTVSSRKQVTKMLA	Homo sapiens
1436	4734	Thyrotropin Releasing Hormone Receptor	P34981	1198	RAAFRLKLCNCKQKPTE	Homo sapiens
1437	4734	Thyrotropin Releasing Hormone Receptor	P34981	1199	KPANYSVALNYSVIKE	Homo sapiens
1438	4734	Thyrotropin Releasing Hormone Receptor	P34981	1200	KESDHFSTELDDITVID	Homo sapiens
1439	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1771	EQKNKPRNDIDFKII	Homo sapiens
1440	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1772	SYRPSDNVSSSTKKPAPC	Homo sapiens
1441	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1773	LNSSTEDGIKRIQDDC	Homo sapiens
1442	4946	Angiotensin II Type 2 Receptor	P50052	1321	CSQKPSDKHLDAPIL	Homo sapiens
1443	4946	Angiotensin II Type 2 Receptor	P50052	1322	DRYQSVIVPFLSQRRN	Homo sapiens
1444	4946	Angiotensin II Type 2 Receptor	P50052	1323	RKHLTKTNSYGKNRITRD	Homo sapiens
1445	4946	Angiotensin II Type 2 Receptor	P50052	1324	RVPTITWLQGKRSMSC	Homo sapiens
1446	5072	Pyrimidinergic Receptor P2Y4	P51582	1142	CHDTTRPEEFDHYVHFSSA	Homo sapiens
1447	5072	Pyrimidinergic Receptor P2Y4	P51582	1145	YLLTGDKYRRQLRQLC	Homo sapiens
1448	5072	Pyrimidinergic Receptor P2Y4	P51582	2696	HPLRALRWGRPRLAG	Homo sapiens
1449	5072	Pyrimidinergic Receptor P2Y4	P51582	2697	HIITRTIYVILARLLEADC	Homo sapiens
1450	5117	Vasopressin V1A Receptor	AAA62271.1	262	REAEALGEGNGPPRDVRNEE	Homo sapiens
1451	5117	Vasopressin V1A Receptor	AAA62271.1	263	NVRGKTASRQSKGAEQ	Homo sapiens
1452	5117	Vasopressin V1A Receptor	AAA62271.1	264	QNMKEFKNKEDTDSMSRRQ	Homo sapiens
1453	5117	Vasopressin V1A Receptor	AAA62271.1	265	RQTFYSNNRSPNTSGMWKD	Homo sapiens
1454	5118	Vasopressin V1B Receptor	AAA65687.1	266	NATPWLGRLDEELAKVE	Homo sapiens
1455	5118	Vasopressin V1B Receptor	AAA65687.1	267	TRGLPSRVSSINTISRAKIR	Homo sapiens

1456	5118	Vasopressin V1B Receptor	AAA65687.1	268	QPRMRRRLSDGSLSRH	Homo sapiens
1457	5118	Vasopressin V1B Receptor	AAA65687.1	269	ESPRDLELDGEGTAET	Homo sapiens
1458	5119	Vasopressin V2 Receptor	CAA77746.1	270	SNSSQERPLDTRDPLARAE	Homo sapiens
1459	5119	Vasopressin V2 Receptor	CAA77746.1	271	RHGSGAHWNRPVLVAVAFS	Homo sapiens
1460	5119	Vasopressin V2 Receptor	CAA77746.1	272	CQVLIFREIHASLVPGPSE	Homo sapiens
1461	5119	Vasopressin V2 Receptor	CAA77746.1	273	RGRTPPSLGPQDESC	Homo sapiens
1462	5133	Peropsin	O14718	1147	KNEDGSVFSQTEHNIV	Homo sapiens
1463	5133	Peropsin	O14718	1148	IKYKELRPTNAIIN	Homo sapiens
1464	5133	Peropsin	O14718	1149	RKNDRSFVSYMTVIA	Homo sapiens
1465	5133	Peropsin	O14718	1150	CTESLNIRDWSDQIDVTIK	Homo sapiens
1466	5133	Peropsin	O14718	1151	VANKKFRRLAMLFKC	Homo sapiens
1467	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	987	CGPAGRTSSRSQSLRSTDAR	Homo sapiens
1468	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	988	EENRDKWEEAQLAGPN	Homo sapiens
1469	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	989	CRWVDRQEEGNGDSGG	Homo sapiens
1470	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	990	KRDKAPKSSFVGDGDI	Homo sapiens
1471	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	991	RKLQHAAEKDKEVLGP	Homo sapiens
1472	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	981	CLRSPPEEAVAQAESEVGR	Homo sapiens
1473	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	982	GSSNDLFTTEMRYGEE	Homo sapiens
1474	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	983	MARDGISDKSKQIRAGSERC	Homo sapiens
1475	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	984	EDAPRARPEGTPRRAAK	Homo sapiens
1476	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	985	RSRTMPRTVPGSTMKMGSL	Homo sapiens
1477	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	986	KREKRWSVSSGGAAERSVC	Homo sapiens
1478	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	976	RRVFPTNFPGLQKKGE	Homo sapiens
1479	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	977	CNLTREAKRPPKEEFG	Homo sapiens
1480	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	978	KLKHRAGQMSEPHSGLTKC	Homo sapiens

1481	5521	Inhibitor 3				979	CTDDNLRGADMIVHPQER	Homo sapiens
1482	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242			980	SRSETGSTISMSSILERR	Homo sapiens
1483	6031	SIV/HIV Receptor BONZO	O00574			1101	NDSSQEEHQDFLQFSK	Homo sapiens
1484	6031	SIV/HIV Receptor BONZO	O00574			1102	KATKAYNQQAQRMTWG	Homo sapiens
1485	6031	SIV/HIV Receptor BONZO	O00574			1103	KTLLHAGGFQKHRSK	Homo sapiens
1486	6031	SIV/HIV Receptor BONZO	O00574			1104	SLKFRKNFWKLVKDIGC	Homo sapiens
1487	6031	SIV/HIV Receptor BONZO	O00574			1105	KSEEDNSKTFASHNV	Homo sapiens
1488	6204	Lysophosphatidic Acid Receptor Edg4	AAC27728.1			66	ERHRSMVMAVQLHSRLPRGR	Homo sapiens
1489	6204	Lysophosphatidic Acid Receptor Edg4	AAC27728.1			67	RRRVQRMAEHVSCHPVRE	Homo sapiens
1490	6204	Lysophosphatidic Acid Receptor Edg4	AAC27728.1			68	NAAVWSCRDAEMRRITERR	Homo sapiens
1491	6204	Lysophosphatidic Acid Receptor Edg4	AAC27728.1			69	RQSTRESVHYTSSAQGGAST	Homo sapiens
1492	6213	C-C Chemokine Receptor 5	AAC50598.1			38	YSQYQFWKNFQTLK	Homo sapiens
1493	6213	C-C Chemokine Receptor 5	AAC50598.1			39	QQEAPERASSVYTRSTGEQE	Homo sapiens
1494	6213	C-C Chemokine Receptor 5	AAC50598.1			40	RSQKEGLHYTCSSHFPYSQ	Homo sapiens
1495	6213	C-C Chemokine Receptor 5	AAC50598.1			309	MDYQVSSPIVDINYITSEPC	Homo sapiens
1496	6363	Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421			1092	EDEYDVLIERGELESEAEQC	Homo sapiens
1497	6363	Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421			1093	KGNFFSARRRVPCGIITSVL	Homo sapiens
1498	6363	Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421			1094	MRKTLRFREQRYSLFLVFA	Homo sapiens
1499	6363	Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421			1096	RSNPLQPRGQSAQGTRE	Homo sapiens
1500	6446	Pael Receptor (GPR37)	AAC51281.1			127	GPGNSARDVLRARAPREEQG	Homo sapiens
1501	6446	Pael Receptor (GPR37)	AAC51281.1			129	DPGGPRRGNSINRRVRLKNP	Homo sapiens
1502	6446	Pael Receptor (GPR37)	AAC51281.1			130	LRQLSKEDLGFSGRAPAERC	Homo sapiens
1503	6446	Pael Receptor (GPR37)	AAC51281.1			131	PRGAVISGRSQEQSVKTPG	Homo sapiens
1504	6446	Pael Receptor (GPR37)	AAC51281.1			1781	CIQKSTVTSDDDNDNEYTE	Homo sapiens
1505	6446	Pael Receptor (GPR37)	NP_005293.1			1806	CIQKSTVTSDDDNDNEYTE	Homo sapiens
1506	6536	Putative Neurotransmitter Receptor (PNR)	O14804			319	TDWVETRLSQWLEEMPC	Homo sapiens

1507	6536	Putative Neurotransmitter Receptor (PNR)	O14804	320	KSLAGAAKHERKAAKT	Homo sapiens
1508	6536	Putative Neurotransmitter Receptor (PNR)	O14804	321	RKALKLTLQKVFSPQTR	Homo sapiens
1509	6536	Putative Neurotransmitter Receptor (PNR)	O14804	485	HPAAFCYQVNGSCPR	Homo sapiens
1510	6777	G Protein-Coupled Receptor TM7SF1	O60478	788	KAKSKYSPELLKYRLP	Homo sapiens
1511	6777	G Protein-Coupled Receptor TM7SF1	O60478	790	KTGNWERKIVSVRVA	Homo sapiens
1512	6777	G Protein-Coupled Receptor TM7SF1	O60478	791	KSVHSFDYDWWNVSDQAD	Homo sapiens
1513	6777	G Protein-Coupled Receptor TM7SF1	O60478	792	RVRNPTKDLINPGMVP	Homo sapiens
1514	6777	G Protein-Coupled Receptor TM7SF1	O60478	793	RYDSDDDLAWNIAPQGLQ	Homo sapiens
1515	6853	Purinergic Receptor P2Y11	O43190	865	PTLSFSLKRPQGGAGNC	Homo sapiens
1516	6853	Purinergic Receptor P2Y11	O43190	866	GALGRAVLSPGMTVAE	Homo sapiens
1517	6853	Purinergic Receptor P2Y11	O43190	867	MRVLNVDAARRRWSTRC	Homo sapiens
1518	6853	Purinergic Receptor P2Y11	O43190	868	CPGYRDSWNPEDAKSTGQA	Homo sapiens
1519	6853	Purinergic Receptor P2Y11	O43190	2299	CPANFLAAADDKLSGFQGD	Homo sapiens
1520	6853	Purinergic Receptor P2Y11	O43190	2300	ASNGLALYRFSIRKQR	Homo sapiens
1521	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	137	CNRSSIRHHEQPETSN	Homo sapiens
1522	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	139	PNQIRIRIMAAAKPKHD	Homo sapiens
1523	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	140	EKRLRVHAHSTDSAR	Homo sapiens
1524	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	141	VQRPLLFASRRQSSARRTEK	Homo sapiens
1525	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	142	QSEAEPSQSKQSLSLESLEP	Homo sapiens
1526	7221	Galanin Receptor GalR2	AAC39634.1	197	NLTVCHPAWSAPRRRAMD	Homo sapiens
1527	7221	Galanin Receptor GalR2	AAC39634.1	198	RAVDPVAAAGSGARRAKRK	Homo sapiens
1528	7221	Galanin Receptor GalR2	AAC39634.1	199	GRAPGRASGRVCAAAARG	Homo sapiens
1529	7221	Galanin Receptor GalR2	AAC39634.1	200	ERESDLLHMSEAAAGALRPC	Homo sapiens
1530	7246	Orexin Receptor 1	AAC39601.1	235	DQLGDLEQGLSGEPQP	Homo sapiens
1531	7246	Orexin Receptor 1	AAC39601.1	236	EPSATPGAAQMGVPPGSR	Homo sapiens

1532	7246	Orexin Receptor 1	AAC39601.1	237	KRPSDQLGDLQGLSGEPQ	Homo sapiens
1533	7246	Orexin Receptor 1	AAC39601.1	239	KAPSPRSSASHKSLSLQSRC	Homo sapiens
1534	7247	Orexin Receptor 2	AAC39602.1	240	SELNETQEPFLNPTDYDDEE	Homo sapiens
1535	7247	Orexin Receptor 2	AAC39602.1	241	KWKPLQPVSQPRGPGQ	Homo sapiens
1536	7247	Orexin Receptor 2	AAC39602.1	242	TKRMSAVAAEIKQIRA	Homo sapiens
1537	7247	Orexin Receptor 2	AAC39602.1	243	RQEDRLTRGRITSTSRKS	Homo sapiens
1538	8436	Platelet-Activating Factor Receptor	P25105	1097	AVTRPIKTAQANTKR	Homo sapiens
1539	8436	Platelet-Activating Factor Receptor	P25105	1098	DSNTVPSAGSGNVTRC	Homo sapiens
1540	8436	Platelet-Activating Factor Receptor	P25105	1099	QQRNAEVKRRALWMVC	Homo sapiens
1541	8436	Platelet-Activating Factor Receptor	P25105	1100	KKFRKHLTEKFYSMRSSRKC	Homo sapiens
1542	8509	G Protein-Coupled Receptor Ls8509	Q14439	398	DRYYSVLYPLERKISDAKSR	Homo sapiens
1543	8509	G Protein-Coupled Receptor Ls8509	Q14439	400	DEESEAKYIGSADFQAKE	Homo sapiens
1544	8509	G Protein-Coupled Receptor Ls8509	Q14439	401	ETRNSKKRLPLGNTPEE	Homo sapiens
1545	8509	G Protein-Coupled Receptor Ls8509	Q14439	402	ELUQTKVPKVGRRVERKMRSR	Homo sapiens
1546	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1078	KKQRKAQNFTSILIAN	Homo sapiens
1547	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1079	FRNLSLPTDLYTHQVAC	Homo sapiens
1548	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1080	CVENWPSKKDRLLFTT	Homo sapiens
1549	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1081	CLRRRNAKVDKKKENEGR	Homo sapiens
1550	9421	Neuropeptide Y Receptor Type 1	P25929	1064	DEPFQNVTLDAYKDYVC	Homo sapiens
1551	9421	Neuropeptide Y Receptor Type 1	P25929	1065	CYFKYIRLKRNNMMMDK	Homo sapiens
1552	9421	Neuropeptide Y Receptor Type 1	P25929	1066	CDFRSRDDDYETIAMS	Homo sapiens
1553	9421	Neuropeptide Y Receptor Type 1	P25929	1498	ENDDCHLPLAMIFTALA	Homo sapiens
1554	9421	Neuropeptide Y Receptor Type 1	P25929	2291	SNFSEKNAQLLAFENDDC	Homo sapiens

1555	9834	Type 1 Corticotropin releasing factor Receptor 1	NP_004373.1	1778	CESLSLASISDNGYRE	Homo sapiens
1556	9834	Corticotropin releasing factor Receptor 1	NP_004373.1	1779	CQEILNEEKSKVHYHVA	Homo sapiens
1557	10457	Frizzled-2	NP_001457.1	1774	NHSEDGAPALLTAPP	Homo sapiens
1558	10457	Frizzled-2	NP_001457.1	1775	GGAPPRVATLEHPFHC	Homo sapiens
1559	10457	Frizzled-2	NP_001457.1	1776	CEPARPDGSMFFSQEE	Homo sapiens
1560	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1082	AAREAGAAVRRPLGPE	Homo sapiens
1561	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1083	LYRPPPREKIGRRRA	Homo sapiens
1562	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1085	PRELAAAGQSFHGCCLYR	Homo sapiens
1563	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1086	CKTVRLSDVRVRPVNTYAR	Homo sapiens
1564	14198	Interleukin-8 Receptor B	P25025	802	EDFWKGEDLSNYSYS	Homo sapiens
1565	14198	Interleukin-8 Receptor B	P25025	803	PFELDDAAPCEPESLE	Homo sapiens
1566	14198	Interleukin-8 Receptor B	P25025	804	RRTVYSSNVSPACYE	Homo sapiens
1567	14198	Interleukin-8 Receptor B	P25025	805	SKDSLPKDSRPSFVGS	Homo sapiens
1568	14641	Calcitonin Receptor	P30988	766	PKPFLYVVGRRKKMMDAQYKC	Homo sapiens
1569	14641	Calcitonin Receptor	P30988	769	VEVVPNGELVRRDPVSC	Homo sapiens
1570	14641	Calcitonin Receptor	P30988	771	KIQWNGRWGRRPSNRS	Homo sapiens
1571	14641	Calcitonin Receptor	P30988	772	CHQEPRNEPANNQGEESAE	Homo sapiens
1572	16041	C-C Chemokine Receptor 6	P51684	355	TKSFRILSRITLPRSKIIC	Homo sapiens
1573	16041	C-C Chemokine Receptor 6	P51684	356	STFVFNQKYNTQGSDVCE	Homo sapiens
1574	16041	C-C Chemokine Receptor 6	P51684	357	TAANLGKMNPRSCQSE	Homo sapiens
1575	16041	C-C Chemokine Receptor 6	P51684	358	RYSENISRQITSETADNDNAS	Homo sapiens
1576	16599	Smoothed	NP_005622.1	2595	CPLAPPELHPPAPAP	Homo sapiens
1577	16599	Smoothed	NP_005622.1	2666	CAIVERERGWPDLR	Homo sapiens
1578	16599	Smoothed	NP_005622.1	2667	CTNEVQNIKFNSSGQ	Homo sapiens
1579	16599	Smoothed	NP_005622.1	2668	CEVPLVRTDNPKSWYE	Homo sapiens
1580	16599	Smoothed	NP_005622.1	2669	CRADGTMRLGPTSNE	Homo sapiens

1581	16599	Smoothed	NP_005622.1	2670	EAEISPELQKRLGRKK	Homo sapiens
1582	16599	Smoothed	NP_005622.1	2671	ANVTIGLPTKQIPDC	Homo sapiens
1583	17250	G Protein-Coupled Receptor GPR45	O43898	1227	SNASDSGSTQLPAPLR	Homo sapiens
1584	17250	G Protein-Coupled Receptor GPR45	O43898	1228	CVLGYTELPADRAYVV	Homo sapiens
1585	17250	G Protein-Coupled Receptor GPR45	O43898	1249	LNTVRKNAVRVHNQSD	Homo sapiens
1586	17250	G Protein-Coupled Receptor GPR45	O43898	1272	KVPERIRRIQIPSTVYC	Homo sapiens
1587	17250	G Protein-Coupled Receptor GPR45	O43898	1273	DSLDRQLTRAGLRRL	Homo sapiens
1588	17345	G Protein-Coupled Receptor D6	LR13	363	EDADAENSSFYYDYLDE	Homo sapiens
1589	17345	G Protein-Coupled Receptor D6	LR13	364	DKYLEIVHAQPHYRLRTR	Homo sapiens
1590	17345	G Protein-Coupled Receptor D6	LR13	365	CVLVRLRPAGQGGRALK	Homo sapiens
1591	17345	G Protein-Coupled Receptor D6	LR13	366	DLGERQSENYPNKEDVGNK	Homo sapiens
1592	17535	Gaba(b) Receptor 1	O95375	188	EKLTKRLKRHPETGGFQEA	Homo sapiens
1593	17535	Gaba(b) Receptor 1	O95375	189	KKEEKKEWRTILEPWK	Homo sapiens
1594	17535	Gaba(b) Receptor 1	O95375	190	DPLHRTIETFAKEPKEDID	Homo sapiens
1595	17535	Gaba(b) Receptor 1	O95375	191	YEIEYVCRGEREVVGPVKVRK	Homo sapiens
1596	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1205	SLWETVQKWREYRRQC	Homo sapiens
1597	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1206	LQKDNSSLPWRDLSEC	Homo sapiens
1598	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1208	CIVVSKLKANLMCKTD	Homo sapiens
1599	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1209	RWRLEHLHIQRDSSMKPLKC	Homo sapiens
1600	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1520	CQVDETEEPDVHLPQP	Homo sapiens
1601	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1521	REGLEAAGAAGASAAAYSS	Homo sapiens
1602	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1522	KLPSARAKIRITSSPI	Homo sapiens
1603	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1523	ESKSSIKRVLAITTVLS	Homo sapiens

1604	18471	Receptor LOC51210	NP_057456.1	1524	QGTLEILYPDAHLAED	Homo sapiens
1605	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1525	PKTPLKERISLPSRRS	Homo sapiens
1606	19072	G Protein-Coupled Receptor LOC51210	ENSP00000164265	2030	SVVQLRRQRDPDFEWNEGLC	Homo sapiens
1607	19072	Receptor Ls19072	ENSP00000164265	2032	PAVGWHDTSERFYTHGC	Homo sapiens
1608	19072	G Protein-Coupled Receptor Ls19072	ENSP00000164265	2047	AVQVGRQADRRRAFTVPT	Homo sapiens
1609	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1513	EHEPAGEEALRQKRAVATK	Homo sapiens
1610	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1514	ALRQKRAVATKSPTAE	Homo sapiens
1611	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1515	CEKEVLSSNVSWRYEEQQLE	Homo sapiens
1612	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1518	RLANNTGGWDSSGCVWEED	Homo sapiens
1613	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1519	CKQEKSSLFQISKSIG	Homo sapiens
1614	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2164	CTAFQRREGGVPGTRPGSPG	Homo sapiens
1615	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2166	APGTRASRRCDRAGRWE	Homo sapiens
1616	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2167	CPAERVANNRGDFRWPR	Homo sapiens
1617	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2171	QNPPEPEPPADQQLRFRC	Homo sapiens
1618	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2175	VPLGGGAPGTRASRRC	Homo sapiens
1619	22315	G Protein-Coupled Receptor GPR92/GPR93	LR29	425	PAARVHRPSRCRYRD	Homo sapiens
1620	22315	G Protein-Coupled Receptor GPR92/GPR93	LR29	426	TLARPDATGSQRRRKTVRL	Homo sapiens
1621	22315	G Protein-Coupled Receptor GPR92/GPR93	LR29	427	RSKLVAAASVPARDVRG	Homo sapiens
1622	22315	G Protein-Coupled Receptor GPR92/GPR93	LR29	428	AQSERSAVTTDATRPD	Homo sapiens



1623	22925	Latrophilin-3	O94867	1138	CSGKSTESSIGSGKTSGSR	Homo sapiens
1624	22925	Latrophilin-3	O94867	1140	ENHQPHHYTRRRIPQD	Homo sapiens
1625	22925	Latrophilin-3	O94867	1141	ESVTSTQTEPPPAKC	Homo sapiens
1626	22925	Latrophilin-3	O94867	1497	SSASLNREGLLNARD	Homo sapiens
1627	25359	G Protein-Coupled Receptor GPR34	O95853	1255	DRYKINRSIQQRKAIT	Homo sapiens
1628	25359	G Protein-Coupled Receptor GPR34	O95853	1257	CFHYRDKHNAKGEAIFN	Homo sapiens
1629	25359	G Protein-Coupled Receptor GPR34	O95853	1258	RISKRRSKFPNSGKYA	Homo sapiens
1630	25359	G Protein-Coupled Receptor GPR34	O95853	1259	CQLLRRRFQGEPSRSESTSE	Homo sapiens
1631	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2721	RLQEIILTFEKINKTR	Homo sapiens
1632	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2722	KGKSRRAENASLGPTN	Homo sapiens
1633	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2723	LLFGTIMDHHKIRDALR	Homo sapiens
1634	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2724	RPSIGSSKSQDVVIIMRI	Homo sapiens
1635	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1579	KLPNNELHGGQESHNSGN	Homo sapiens
1636	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1580	SGNIRSDGPGKNITLHNEFD	Homo sapiens
1637	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1581	RQFISQSSRK(RKH)NQSIR	Homo sapiens
1638	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1582	SHLDRLDESAGKILYYC	Homo sapiens
1639	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1584	CRSFSRRILFKKSNIRTRSE	Homo sapiens
1640	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1585	ESIRSLQSVRRSEVRVIYD	Homo sapiens
1641	31568	G Protein-Coupled Receptor RE2	O75963	331	CRKELSNLITEEGGEGGV	Homo sapiens
1642	31568	G Protein-Coupled Receptor RE2	O75963	332	EEDAQRITGRKNSSTSTSSS	Homo sapiens
1643	31568	G Protein-Coupled Receptor RE2	O75963	333	CFGDRYVREPFVQRQRISR	Homo sapiens
1644	31568	G Protein-Coupled Receptor RE2	O75963	334	HSSSTGDTGFSCSQDQSGNL	Homo sapiens

1645	36534	Receptor RE2	O75473	1232	CQKLQKIDLRHNEIVEIKVD	Homo sapiens
1646	36534	G Protein-Coupled Receptor GPR49	O75473	1233	NKGDNSSMDDLHKKDA	Homo sapiens
1647	36534	G Protein-Coupled Receptor GPR49	O75473	1234	QDERDLEDFLDFFED	Homo sapiens
1648	36534	G Protein-Coupled Receptor GPR49	O75473	1235	ERGFVKYSAKFETKA	Homo sapiens
1649	36534	G Protein-Coupled Receptor GPR49	O75473	1236	RSKHPSLMSINSDDVEKQSC	Homo sapiens
1650	37498	Xenotropic and Polytypic Retrovirus Receptor (XPR1)	NP_004727.1	2597	DAQKESTGVTLRQRR	Homo sapiens
1651	37498	Xenotropic and Polytypic Retrovirus Receptor (XPR1)	NP_004727.1	2600	CKKINQISETAEVVTN	Homo sapiens
1652	37498	Xenotropic and Polytypic Retrovirus Receptor (XPR1)	NP_004727.1	2610	ADDQTILLEGMMMDQDDG	Homo sapiens
1653	37498	Xenotropic and Polytypic Retrovirus Receptor (XPR1)	NP_004727.1	2672	KYNQSIILRRPRLASQ	Homo sapiens
1654	37498	Xenotropic and Polytypic Retrovirus Receptor (XPR1)	NP_004727.1	2673	KRYFAKFEKFFQTC	Homo sapiens
1655	37498	Xenotropic and Polytypic Retrovirus Receptor (XPR1)	NP_004727.1	2674	DGDRQKAMKRLRVPPL	Homo sapiens
1656	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2103	RVRSGRVRVSSTRDFQDC	Homo sapiens
1657	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2105	CNNSVPGKEHPFDITVMIRE	Homo sapiens
1658	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2106	APSKPGLPKQAIVPRKVD	Homo sapiens
1659	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2135	AASKPKSTPAVIQGPSGKD	Homo sapiens
1660	42697	G Protein-Coupled Receptor GPR64	O00406	1261	KRSELNKTILQTLSETYFIMC	Homo sapiens
1661	42697	G Protein-Coupled Receptor GPR64	O00406	1262	GNASTERNGVSFSVQNGDVC	Homo sapiens
1662	42697	G Protein-Coupled Receptor GPR64	O00406	1263	CRIRKKKQLGAQRKTSIQD	Homo sapiens
1663	42697	G Protein-Coupled Receptor GPR64	O00406	1264	DTFGKQHMIFNEKEDSC	Homo sapiens

1664	45937	KIAA1624 Protein	AAK57695	2072	PNVNPASAGNQTKQTD	Homo sapiens
1665	45937	KIAA1624 Protein	AAK57695	2073	RVKSPPEAGTQLPKIFS	Homo sapiens
1666	45937	KIAA1624 Protein	AAK57695	2074	KDGYMVVNVSSLSNEPED	Homo sapiens
1667	45937	KIAA1624 Protein	AAK57695	2076	RSTVDSKAMGEKSFVHNING	Homo sapiens
1668	50847	Neurotensin Receptor type 2	O95665	1265	CQPLRARSLTPRTR	Homo sapiens
1669	50847	Neurotensin Receptor type 2	O95665	1266	GQKHELETADGEPEASRVC	Homo sapiens
1670	50847	Neurotensin Receptor type 2	O95665	1267	KKTFIQGGQVSLVRHKD	Homo sapiens
1671	50847	Neurotensin Receptor type 2	O95665	1269	CGEHHPMKRLPPKPQSP	Homo sapiens
1672	50847	Neurotensin Receptor type 2	O95665	2294	STSTPGSSTPSRLELLSEE	Homo sapiens
1673	50847	Neurotensin Receptor type 2	O95665	2301	METSSPRPPRPSSNPG	Homo sapiens
1674	50847	Neurotensin Receptor type 2	O95665	2302	CSQVPSSTPGSSTPSR	Homo sapiens
1675	53440	G Protein-Coupled Receptor LS53440	LR76	1850	DPNGNESSATYFILIG	Homo sapiens
1676	53440	G Protein-Coupled Receptor LS53440	LR76	1851	RHATVLTLPRTKIGV	Homo sapiens
1677	53440	G Protein-Coupled Receptor LS53440	LR76	1852	ILKTVLGLTREAGAKA	Homo sapiens
1678	53440	G Protein-Coupled Receptor LS53440	LR76	1853	HRFSKRDRDSPLPVILAN	Homo sapiens
1679	53440	G Protein-Coupled Receptor LS53440	LR76	1854	KEIRQRILRLFHVATHASE	Homo sapiens
1680	54053	Gaba(b) Receptor 2	O75899	1416	GEDIESDTESFSNDPC	Homo sapiens
1681	54053	Gaba(b) Receptor 2	O75899	1417	SSKQIKTISGKTPQQYE	Homo sapiens
1682	54053	Gaba(b) Receptor 2	O75899	1419	AATQNRRFQFTQNKKE	Homo sapiens
1683	54053	Gaba(b) Receptor 2	O75899	1420	CKDPIEDINSPEHIQRR	Homo sapiens
1684	55728	ETL protein	NP_071442.1	2113	CVLSRKIQEEYVRLFKNV	Homo sapiens
1685	55728	ETL protein	NP_071442.1	2114	CIAANINKTLIKIRSIKEP	Homo sapiens
1686	55728	ETL protein	NP_071442.1	2115	KLNVNHRRTHLTKLMHTVE	Homo sapiens
1687	55728	ETL protein	NP_071442.1	2116	EKITFTLSHRKVTDYRSLC	Homo sapiens
1688	55728	ETL protein	NP_071442.1	2117	SSSLLGYKNNTISAKD	Homo sapiens
1689	56923	Muscarinic acetylcholine	P20309	1421	CSSYELQQQSMKRSNRK	Homo sapiens

1690	56923	Receptor M3	P20309	1422	KPSSEQMDQDHSDDSWNNN	Homo sapiens
1691	56923	Muscarinic acetylcholine Receptor M3	P20309	1423	DLERKADKLQAQKSVD	Homo sapiens
1692	56923	Muscarinic acetylcholine Receptor M3	P20309	1424	KEATLAKRFALKTRSQ	Homo sapiens
1693	57180	Muscarinic acetylcholine Receptor M3	NP_062813.1	2097	PPTCRPRRMSVCYRPPGNE	Homo sapiens
1694	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2098	CLAVTRPFLAPRLRSPALAR	Homo sapiens
1695	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2099	RGARWGSGRHGARGVR	Homo sapiens
1696	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2100	TAGDLLPRAGPRFLTR	Homo sapiens
1697	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2101	EGSGEARGGGRSREGTME	Homo sapiens
1698	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2102	RTTPQLKVVGGGRGNGD	Homo sapiens
1699	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1909	RSAPTALSRRLRARTHLPGC	Homo sapiens
1700	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1910	VRGSHGEPDASLMPRSC	Homo sapiens
1701	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1911	RKEDSVLMEATSGGPTSFR	Homo sapiens
1702	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1912	DQNKADIGGMLPGLTVRSV	Homo sapiens
1703	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1913	PAGWPDQSLAESDSEDPG	Homo sapiens
1704	74514	5-HT5A Receptor	NP_076917.1	2118	ETNHSLGKDDLPPSSP	Homo sapiens
1705	74514	5-HT5A Receptor	NP_076917.1	2119	SLVHELSGRRWQLGRRLC	Homo sapiens
1706	74514	5-HT5A Receptor	NP_076917.1	2120	LLFGWGETYSEGSEEC	Homo sapiens
1707	74514	5-HT5A Receptor	NP_076917.1	2121	FRVGSRTNSVSPISE	Homo sapiens
1708	74514	5-HT5A Receptor	NP_076917.1	2122	RHATVTFQPEGDTWREQK	Homo sapiens

1709	81765	Thromboxane A2 Receptor	P21731	1277	GITRPFSPAVASQRR	Homo sapiens
1710	81765	Thromboxane A2 Receptor	P21731	1278	CHVHGQEAAGQRPRDSEVE	Homo sapiens
1711	81765	Thromboxane A2 Receptor	P21731	1279	RNPPAMSPAGQLSRTE	Homo sapiens
1712	81765	Thromboxane A2 Receptor	P21731	1280	RRLQPRLSRPRRVSCL	Homo sapiens
1713	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	155	RYLSVVSPLSLRVPTLRC	Homo sapiens
1714	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	156	SSILDTFHKVLSSGCDYSE	Homo sapiens
1715	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	157	VEILRTLFRSRKRRHRTVK	Homo sapiens
1716	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	158	QTLFRTQIIRSCEAKQQL	Homo sapiens
1717	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	159	RLQAPSPASIPSPGAFAYE	Homo sapiens
1718	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1589	RIEPPYYSIVNSSPSQEE	Homo sapiens
1719	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1590	IMIAQTLRKNAQVRKC	Homo sapiens
1720	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1591	RNGNYNKLQHVQTRGYTKS	Homo sapiens
1721	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1592	SRLQLVSAINLSTAKD	Homo sapiens
1722	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1593	CKQKTRLRAMGKGNLEVNIR	Homo sapiens
1723	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1594	NSAYMLSPKPKKFFVDQAC	Homo sapiens
1724	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1218	CKVQDSNRRKMLPTQF	Homo sapiens
1725	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1219	HAVSLTKLVRGRKPLS	Homo sapiens
1726	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1220	NVNVFSELSAPRRNED	Homo sapiens
1727	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1221	TKQRNPMMDYPVEDAFC	Homo sapiens
1728	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1222	CKPQLVKKSYGVENRA	Homo sapiens
1729	152198	Tachykinin Receptor 2	AAB05897.1	1286	RRVPGHQAHAHANLRH	Homo sapiens
1730	152198	Tachykinin Receptor 2	AAB05897.1	1287	KEDKLELTPTLSLRVNR	Homo sapiens
1731	152198	Tachykinin Receptor 2	AAB05897.1	1288	KETLFMAGDTAPSEATSGEA	Homo sapiens

1732	152198	Tachykinin Receptor 2	AAB05897.1	1290	CVVWPEDSGGKTILL	Homo sapiens
1733	152201	Thyrotropin Receptor	P16473	1445	RQRKSVNALNSPLHQE	Homo sapiens
1734	152201	Thyrotropin Receptor	P16473	1446	KFQDTHNNAHYVFFEEQED	Homo sapiens
1735	152201	Thyrotropin Receptor	P16473	1449	CHVKIVTVRNPNQYNPGDK	Homo sapiens
1736	152201	Thyrotropin Receptor	P16473	1450	CKRQAQAYRGQRVPPKNSTD	Homo sapiens
1737	152245	C-C Chemokine Receptor 2	NP_000639.1	1896	SRSRFRNTNESGEEVTI	Homo sapiens
1738	152245	C-C Chemokine Receptor 2	NP_000639.1	1898	CQKEDSVVCGPYFPRGWNN	Homo sapiens
1739	152245	C-C Chemokine Receptor 2	NP_000639.1	1899	SGEEVTFFEDYDYGAPCHKF	Homo sapiens
1740	152299	Interleukin-8 Receptor A	P25024	806	DFDDLNTFGMPPADEDYSPC	Homo sapiens
1741	152299	Interleukin-8 Receptor A	P25024	807	CWGLSMNLSLPFLFRQAYH	Homo sapiens
1742	152299	Interleukin-8 Receptor A	P25024	808	RHRVTSYTSSVNVSSN	Homo sapiens
1743	152299	Interleukin-8 Receptor A	P25024	1490	CMLETETLNKYVVIAYALV	Homo sapiens
1744	158822	Mas Proto-Oncogene	NP_002368.1	1527	EETNISTGRNASVGNHRQ	Homo sapiens
1745	158822	Mas Proto-Oncogene	NP_002368.1	1528	RRNPTVWTHLSIAD	Homo sapiens
1746	158822	Mas Proto-Oncogene	NP_002368.1	1529	YVMCIDREEESHNRNDCRAV	Homo sapiens
1747	158822	Mas Proto-Oncogene	NP_002368.1	1530	SSTILVVKIRKNTWASHSK	Homo sapiens
1748	158822	Mas Proto-Oncogene	NP_002368.1	1531	TRAFKDEMQPRRQKDNC	Homo sapiens
1749	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1578	ERYLGVAFPVQYKLSRPL	Homo sapiens
1750	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1586	QYLNTEQVRSGNEITC	Homo sapiens
1751	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1588	EGTNEDRGVGGQEGEMPSSD	Homo sapiens
1752	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1616	RGLQVLRNQGSSLLGRRGKD	Homo sapiens
1753	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1292	KQCLEEAQLENETIGCS	Homo sapiens
1754	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1296	KDLALFDSGESDQCSE	Homo sapiens
1755	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1297	LQKLPPDIRKSDSSP	Homo sapiens
1756	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1298	NPKYRHPSGGSGNGATC	Homo sapiens
1757	160040	Vasoactive Intestinal Polypeptide Receptor 1	P41587	1299	KVFSNFYSKAGNISKNC	Homo sapiens
1758	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1301	CGYSDPEDESKITFYI	Homo sapiens
1759	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1305	KRKWRSRCPTPSASRD	Homo sapiens

1760	160040	Polypeptide Receptor 2 Vasoactive Intestinal	P41587	1306	CGSFSRNGSEGAHQFHR	Homo sapiens
1761	160055	Polypeptide Receptor 2 Motilin Receptor (GPR38)	AAC26081.1	132	REPPWPALPPCDERRCS	Homo sapiens
1762	160055	Motilin Receptor (GPR38)	AAC26081.1	134	SPSPGPETAEEAAALFSREC	Homo sapiens
1763	160055	Motilin Receptor (GPR38)	AAC26081.1	135	SSRRPLRGPAAASGRERGRQ	Homo sapiens
1764	160055	Motilin Receptor (GPR38)	AAC26081.1	136	RKSRPRGFHRSRDTAG	Homo sapiens
1765	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1595	NPLVTGYLGRGPGLKTVC	Homo sapiens
1766	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1596	GRYLGAAPFLGYQAFRRPC	Homo sapiens
1767	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1597	CLEAWDPASAGPARFS	Homo sapiens
1768	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1598	CLRALARSGLTHRRKLR	Homo sapiens
1769	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1599	NASNVASFLYPNLGGSWRK	Homo sapiens
1770	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1617	TVSLPLKAVEALASGA	Homo sapiens
1771	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1618	DHSNTSLGINTPVNGSPVC	Homo sapiens
1772	160189	G Protein-Coupled Receptor GPR54	BAB55446	1926	CSEAFPSRALERAFALY	Homo sapiens
1773	160189	G Protein-Coupled Receptor GPR54	BAB55446	1927	ERAGAVRAKVSRLVAWV	Homo sapiens
1774	160189	G Protein-Coupled Receptor GPR54	BAB55446	1928	RRPGSPDPAAPHAELHRLGS	Homo sapiens
1775	160189	G Protein-Coupled Receptor GPR54	BAB55446	1929	GAPANASGCPGCGANASD	Homo sapiens
1776	160202	Adrenomedullin Receptor (ADMR)	O15218	390	DLFNHTLSECHVELSQST	Homo sapiens
1777	160202	Adrenomedullin Receptor (ADMR)	O15218	391	NVLTACRLRQPGQPKRRHC	Homo sapiens
1778	160202	Adrenomedullin Receptor (ADMR)	O15218	392	KDQTKAGTCASSSSCSTG	Homo sapiens
1779	160202	Adrenomedullin Receptor (ADMR)	O15218	484	KGDSQPAAAAAPHPEPSLS	Homo sapiens
1780	160204	G Protein-Coupled Receptor RTA	LR85	1977	CRARRRQRSTKLNHVILA	Homo sapiens

1781	160204	G Protein-Coupled Receptor RTA	LR85	1983	CPGLSEAPELYRRGFLTIEQ	Homo sapiens
1782	160204	G Protein-Coupled Receptor RTA	LR85	1985	RDGAELGEAGGSTPNTVT	Homo sapiens
1783	160204	G Protein-Coupled Receptor RTA	LR85	2173	LAGRDKSQRLWEPLRV	Homo sapiens
1784	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1678	RTTRKWNWGCTHCYLAFNSD	Homo sapiens
1785	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1679	RAKLLREGVWVHANRPKR	Homo sapiens
1786	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1680	RRVMLKEYHPRMLLI	Homo sapiens
1787	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1682	SALARAFGEEFLSSC	Homo sapiens
1788	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1683	RSCSRKMNSSGCLSEE	Homo sapiens
1789	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	151	PGPDRDATCNSRQAALAVSK	Homo sapiens
1790	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	152	SSHAAVSLRLQHRGRRRPGR	Homo sapiens
1791	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	153	DDSELGGAGSSRRRTSSIA	Homo sapiens
1792	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	154	DGPPEPGAEOHLELEPGRR	Homo sapiens
1793	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2220	CPILEQMSRLQSHSNTSIRY	Homo sapiens
1794	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2221	RYIDHAAVLLHGLASLLGLV	Homo sapiens
1795	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2222	CRMIRQTVVTTWV/LHLALSDL	Homo sapiens
1796	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2223	SASLPFFTYFLAVGHSWE	Homo sapiens
1797	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2224	CLVLWALAVLNTVPYVFVRD	Homo sapiens
1798	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2225	CYYNVLLNPGPDRDAT	Homo sapiens
1799	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2226	CNSRQAALAVSKFLAFLVP	Homo sapiens
1800	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2228	RGLPFTVTSIAFFNSVANPVL	Homo sapiens



1801	160210	Receptor GPR44 (CRTH2) G Protein-Coupled	NP_004769.1	2229	CSRPEPRGPALLGWLLGS	Homo sapiens
1802	160210	Receptor GPR44 (CRTH2) G Protein-Coupled	NP_004769.1	2230	CAASPQTGPLNRALSS	Homo sapiens
1803	160212	Receptor GPR44 (CRTH2) G Protein-Coupled	Q9Y2T5	444	KEINDRRARFPSHEVDSSRE	Homo sapiens
1804	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	445	CVKDQEAQEPKPRKRANS	Homo sapiens
1805	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	446	RWTEWRILNMSSGIVNASER	Homo sapiens
1806	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	622	HSCPLGFGHYSVVDVCIFE	Homo sapiens
1807	160217	Receptor GPR52 G Protein-Coupled	AAD22410.1	161	GKVEKYMCFHNMSDDTWSAK	Homo sapiens
1808	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	162	RSIHILLGRRDHTQDWVQQK	Homo sapiens
1809	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	163	CRAKQSIFFLQLSM	Homo sapiens
1810	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	164	KEFRMINIRAHPRSRVQLVLQ	Homo sapiens
1811	160219	Receptor GPR55 G Protein-Coupled	AAC52028.1	2	AQRPTDVGQAEATRKAAR	Homo sapiens
1812	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	3	KEFQEASALAVAPRAKAHK	Homo sapiens
1813	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	123	GGFCFRSTRHNFNSMR	Homo sapiens
1814	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	125	ETIRRALYITSLSDANC	Homo sapiens
1815	160221	Receptor GPR35 G Protein-Coupled	LR6	335	FPPVLDGGGDEDEAPCALEQ	Homo sapiens
1816	160221	Receptor GPR27 G Protein-Coupled	LR6	338	RGARRLLVLEEFKTEKRLC	Homo sapiens
1817	160221	Receptor GPR27 G Protein-Coupled	LR6	496	NASEPGSGGGGEEAALGLK	Homo sapiens
1818	160221	Receptor GPR27 G Protein-Coupled	O54897	515	GLRALACLPVAMLAARRA	Mus musculus
1819	160221	Receptor GPR27 G Protein-Coupled	LR6	1291	RPAGPGRGARRLLVLE	Homo sapiens

1820	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1606	CQRPPKQEDGGQSPV	Homo sapiens
1821	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1607	CNMIGDVTTEQYFALRRK	Homo sapiens
1822	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1610	EGRADEQSAEAAALAVP	Homo sapiens
1823	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1611	QNFVGRRRYGAEQNPTVK	Homo sapiens
1824	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1600	RIFRSIKQSMGLSAAQKAK	Homo sapiens
1825	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1601	CDRFVAVVVALESRRR	Homo sapiens
1826	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1604	ATDHSRQEVSRHKGWKE	Homo sapiens
1827	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1605	KTDVTRLTHSRDTEELQS	Homo sapiens
1828	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	403	ETQEQQSRSKRGTEDEEAK	Homo sapiens
1829	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	404	SPNPKDGGTPDSGQELR	Homo sapiens
1830	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	405	CQLVTWRVRGPPGRKSE	Homo sapiens
1831	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	406	AANGSDNKLKTEVSS	Homo sapiens
1832	160225	Sphingolipid Receptor Edg6	CAA04118.1	70	PRDSFRGSRSLSRMRE	Homo sapiens
1833	160225	Sphingolipid Receptor Edg6	CAA04118.1	71	ERFATMVRPVAESGATKTSR	Homo sapiens
1834	160225	Sphingolipid Receptor Edg6	CAA04118.1	72	RLVQASGGQKAPRPAAR	Homo sapiens
1835	160225	Sphingolipid Receptor Edg6	CAA04118.1	73	RAVEAHSGASTDSSLRPD	Homo sapiens
1836	160225	Sphingolipid Receptor Edg6	CAA04118.1	1914	IFRLVQASGGQKAPRPAAR	Homo sapiens
1837	160225	Sphingolipid Receptor Edg6	CAA04118.1	1915	DSSLRPDSFRGSRSLSRM	Homo sapiens
1838	160225	Sphingolipid Receptor Edg6	CAA04118.1	1916	RSLSRMREPLSSSVR	Homo sapiens
1839	160225	Sphingolipid Receptor Edg6	CAA04118.1	1917	GPEDGGGLGALRGLSVAASC	Homo sapiens
1840	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1625	ANIGSLCVSFLQPKKE	Homo sapiens
1841	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1626	ETIFNAVMLWEDETVE	Homo sapiens
1842	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1627	CNRKVYQAVRHNKATENKE	Homo sapiens

1843	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1628	CILEHAVNFEDHSNSGKR	Homo sapiens
1844	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1629	CNTSQRQRKRILSVSTKD	Homo sapiens
1845	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	2303	CDAEKSNTFLCYDKVPLEK	Homo sapiens
1846	160300	Encephalopsin	NP_055137.1	2131	CTVDWKSNDANDSSFV	Homo sapiens
1847	160300	Encephalopsin	NP_055137.1	2132	CVEDLQTIQVILKLYEK	Homo sapiens
1848	160300	Encephalopsin	NP_055137.1	2133	CQRPADLPAAAGSEMQRIP	Homo sapiens
1849	160300	Encephalopsin	NP_055137.1	2134	TSELSVDDSDKTIG	Homo sapiens
1850	160312	Spingolipid Receptor Edg5	O95136	1018	ERHVAIAKVLYGSDKSC	Homo sapiens
1851	160312	Spingolipid Receptor Edg5	O95136	1019	RSRDLRREVLRPLQC	Homo sapiens
1852	160312	Spingolipid Receptor Edg5	O95136	1020	QEHVNYTKETLETQET	Homo sapiens
1853	160312	Spingolipid Receptor Edg5	O95136	1021	GRRRVGTPGHHLLPLR	Homo sapiens
1854	160314	G Protein-Coupled Receptor GPR103	ENSMPRT221753	1922	MMRKKAKFSLRNPVEETKG	Homo sapiens
1855	160314	G Protein-Coupled Receptor GPR103	ENSMPRT221753	1923	MMIEYSNFEKEYDDVTIKM	Homo sapiens
1856	160314	G Protein-Coupled Receptor GPR103	ENSMPRT221753	1924	CEQTEEEKKLRHLALRSE	Homo sapiens
1857	160314	G Protein-Coupled Receptor GPR103	ENSMPRT221753	1925	KKRVGDGSLVLRTHGKEMSK	Homo sapiens
1858	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	463	DRARRERFIMNEKWDINSSE	Homo sapiens
1859	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	464	RKNQEQWHVVSRRKQKLIK	Homo sapiens
1860	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	465	RKSAEKPQQLVMEELKE	Homo sapiens
1861	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	500	RQSAGDRRLGLSLRQTAK	Homo sapiens
1862	160324	G Protein-Coupled Receptor	NP_076403.1	1619	DRFLKIIRPLRNIFLKKP	Homo sapiens
1863	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1620	MILSNKEATPSSVKKC	Homo sapiens
1864	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1622	VYDSYRKSCKDRKNN	Homo sapiens
1865	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1623	ARVPYTHSQTNNTKDC	Homo sapiens

1866	160324	G Protein-Coupled Receptor	NP_076403.1	1624	CMQGRKTTASSQENHSSQTD	Homo sapiens
1867	160329	GPR86/GPR94/P2Y13 Proteinase-Activated Receptor 4	O76067	1308	CANDSTILELPDSSRA	Homo sapiens
1868	160329	Proteinase-Activated Receptor 4	O76067	1309	PLRARALRGRRALGLC	Homo sapiens
1869	160329	Proteinase-Activated Receptor 4	O76067	1310	LQRQTFRLARSDRVLC	Homo sapiens
1870	160329	Proteinase-Activated Receptor 4	O76067	1311	RDKVRAGLFQRSPGDT	Homo sapiens
1871	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1213	CELKRDQLLSQFLKHPQK	Homo sapiens
1872	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1214	TSVRFMGDMVSFEEDR	Homo sapiens
1873	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1215	RQEEEQSEIMEYSVLLP	Homo sapiens
1874	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1216	RTLFQRTKGRSGEAEKR	Homo sapiens
1875	160387	Glucagon-Like Peptide 2 Receptor	O95838	1312	GSILLEETTRKWAQYKQAC	Homo sapiens
1876	160387	Glucagon-Like Peptide 2 Receptor	O95838	1313	QTIENTADIWQDDSEC	Homo sapiens
1877	160387	Glucagon-Like Peptide 2 Receptor	O95838	1315	CPKKLSEGDGAEKLRK	Homo sapiens
1878	160387	Glucagon-Like Peptide 2 Receptor	O95838	1316	QQDHARWPRGSSLSEC	Homo sapiens
1879	160388	Latrophilin-1	O94910	1121	EPTSTHSEHGSGAWC	Homo sapiens
1880	160388	Latrophilin-1	O94910	1126	CEPREVRRVQWPATQQ	Homo sapiens
1881	160388	Latrophilin-1	O94910	1129	RSQDFPPGDGGPEPPR	Homo sapiens
1882	160388	Latrophilin-1	O94910	1131	CTAEDGATSRPLSSPPGRDS	Homo sapiens
1883	160388	Latrophilin-1	O94910	1706	RESAGKNYNKMHKRETC	Homo sapiens
1884	160388	Latrophilin-1	O94910	1707	RDSPSPDSSPEGPSEALP	Homo sapiens
1885	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1938	QVGPCRSLSRGRGSSGAC	Homo sapiens
1886	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1939	CRDAGTELIGHLVPHHDGLR	Homo sapiens

1887	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1940	CKLAQAPGLRAGERSPEESL	Homo sapiens
1888	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1942	RVSDTPEGVNSLDPSHGES	Homo sapiens
1889	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1943	RSGKSQSPYIPFLREES	Homo sapiens
1890	160397	Latrophilin-2	O95490	1132	CEALDSKGIKWPTQIR	Homo sapiens
1891	160397	Latrophilin-2	O95490	1133	DILDAQLQELKPSEKD	Homo sapiens
1892	160397	Latrophilin-2	O95490	1136	RTHSLLYQPQKKV/KSE	Homo sapiens
1893	160397	Latrophilin-2	O95490	1137	RDSPYPESPDMEEEDL	Homo sapiens
1894	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1630	CQEQKMLRTLDSYNNIRD	Homo sapiens
1895	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1631	CDSYANLNTEEDNSLQD	Homo sapiens
1896	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1632	KGTAADAANVTSTILENEE	Homo sapiens
1897	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1633	ERSLSAKDIMKNGKSNHLK	Homo sapiens
1898	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1634	CNLEKEDLSENSQSSMIK	Homo sapiens
1899	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1635	KRRVTKKSGSVSVSIS	Homo sapiens
1900	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1636	CGTQSAHSDYADEEDS	Homo sapiens
1901	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1637	DEEDSFVSDSSDQVQAC	Homo sapiens
1902	160435	LS160435 Receptor	LR80	1918	ATILKLLRTEEAHGREQRR	Homo sapiens
1903	160435	LS160435 Receptor	LR80	1919	CRRVPRDTLDTRESLFSAR	Homo sapiens
1904	160435	LS160435 Receptor	LR80	1920	PLSSKRWRRRRYAVAAC	Homo sapiens
1905	160435	LS160435 Receptor	LR80	1921	CRRMGPRSPSVIFMINL	Homo sapiens
1906	160889	Platelet Activating Receptor Homolog (H963)	O14626	1223	MMIPIKDIKEKSNVGC	Homo sapiens
1907	160889	Platelet Activating Receptor Homolog (H963)	O14626	1224	CLVIRQLYRNKDNENYP	Homo sapiens
1908	160889	Platelet Activating Receptor Homolog (H963)	O14626	1225	CSTRISLFKAKEATLL	Homo sapiens

1909	160889	Homolog (H963)	Platelet Activating Receptor	O14626	1226	ETFASPKETKAQKEKLR	Homo sapiens
1910	161024	Homolog (H963)	Protein A	NP_062832.1	1690	ESRAVGLPLGLSAGRRC	Homo sapiens
1911	161024		Protein A	NP_062832.1	1691	EDARGKRSSLDGSESAK	Homo sapiens
1912	161024		Protein A	NP_062832.1	1692	RTVWEQCVAIMSEEDGD	Homo sapiens
1913	161024		Protein A	NP_062832.1	1693	CKVRFDANGATGPGSRD	Homo sapiens
1914	161024		Protein A	NP_062832.1	1694	RRLSHDETINIFSTPRE	Homo sapiens
1915	161024		Protein A	NP_062832.1	1695	GGPPEYLGQRHRLDEED	Homo sapiens
1916	161024		Protein A	NP_062832.1	1696	REEITFIDETPLPSP	Homo sapiens
1917	161024		Protein A	NP_062832.1	1697	RRPRPLGLSPRRLSLGSP	Homo sapiens
1918	161214		Galanin Receptor GalR3	AAC35944.1	202	RYGALELCVPAWEDARR	Homo sapiens
1919	161214		Galanin Receptor GalR3	AAC35944.1	203	GAAAAEARRRATGRAGR	Homo sapiens
1920	161214		Galanin Receptor GalR3	AAC35944.1	204	ASRHFRARFRRLWPC	Homo sapiens
1921	161214		Galanin Receptor GalR3	AAC35944.1	205	RARRALRRVRPASSGPP	Homo sapiens
1922	161221		Urotensin-II Receptor (GPR14)	LR15	371	ERYAAVLRPLDTVQRPKG	Homo sapiens
1923	161221		Urotensin-II Receptor (GPR14)	LR15	372	RAYRRSQRASFKRARRPGAR	Homo sapiens
1924	161221		Urotensin-II Receptor (GPR14)	LR15	373	RNYRDHLRGRVRGPGSG	Homo sapiens
1925	161221		Urotensin-II Receptor (GPR14)	LR15	374	RARFQRCSGRSLSCSPQPTD	Homo sapiens
1926	161249		G Protein-Coupled Receptor GPR66	LR20	394	ARGHFDPEDLNLIDEALRLK	Homo sapiens
1927	161249		G Protein-Coupled Receptor GPR66	LR20	395	IGLRLRRERLLMQEAKGRG	Homo sapiens
1928	161249		G Protein-Coupled Receptor GPR66	LR20	396	RGSAAARSRYTCRLQQH	Homo sapiens
1929	161249		G Protein-Coupled Receptor GPR66	LR20	397	ALCLGACCHRLRPRHSS	Homo sapiens
1930	161251		Purinergic Receptor P2Y10	O00398	859	CFLLKPFARADWKRRYD	Homo sapiens
1931	161251		Purinergic Receptor P2Y10	O00398	860	PPILRSTDLNNKSC	Homo sapiens
1932	161251		Purinergic Receptor P2Y10	O00398	862	QLSRHGSSTRSRLMSKE	Homo sapiens
1933	161251		Purinergic Receptor P2Y10	O00398	863	LRQPPMAFQGISERQK	Homo sapiens
1934	161293		G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1672	YYDDLDDVDYEEAPC	Equine herpesvirus 2

1935	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1674	CDPYPEMSTNVWRRRAHVAK	Equine herpesvirus 2
1936	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1675	CYVVIIRLLRRPSKK	Equine herpesvirus 2
1937	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1676	CKYIPFLSGDGEKGEPT	Equine herpesvirus 2
1938	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1820	RNLITSSAPTASPPAPS	Homo sapiens
1939	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1821	PSWTSPRRPGPAHPFLQPP	Homo sapiens
1940	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1822	RSSHQKRGITRDVGSNVC	Homo sapiens
1941	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1823	KSTITASFVSSSHMSVEE	Homo sapiens
1942	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1317	TSSPFLMAKPQKDEKNNTKC	Homo sapiens
1943	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1318	KKSMKKNLSSHKKAIG	Homo sapiens
1944	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1319	QRTIHLHLNETKPC	Homo sapiens
1945	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1320	RKHSLSSVTYVPRKKASLPE	Homo sapiens
1946	177191	Histamine H3 Receptor	Q9Y5N1	474	RAVSYRAQQGDTRRAVRK	Homo sapiens
1947	177191	Histamine H3 Receptor	Q9Y5N1	475	QRRTRLRLDGAREAAGPE	Homo sapiens
1948	177191	Histamine H3 Receptor	Q9Y5N1	476	QSFTQRFRLSRDRKVA	Homo sapiens
1949	177191	Histamine H3 Receptor	Q9Y5N1	477	RYGVGEAAVGAEAGEATLG	Homo sapiens
1950	177191	Histamine H3 Receptor	Q9Y5N1	1477	SSRGTERPRSLKRGSKPSAS	Homo sapiens
1951	177191	Histamine H3 Receptor	Q9Y5N1	1479	KPSASSASLEKRMKMVS	Homo sapiens
1952	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2052	RTILFSFYFRDTPRANR	Homo sapiens
1953	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2053	RPEMSRGLLAVRGAFV	Homo sapiens
1954	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2059	CAVLSHRRAGQPWALLV	Homo sapiens
1955	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2733	RVLVSDSLFVICALSL	Homo sapiens

1956	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1014	KRKTNVLSPHISGSIS	Homo sapiens
1957	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1015	CFSQENPERPRIPSTI	Homo sapiens
1958	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1016	SYKDEDMYGTMKKMIC	Homo sapiens
1959	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1017	VERHMSIMRMVRHSN	Homo sapiens
1960	189873	G Protein-Coupled Receptor GPR78	LR37	443	CQRMDVTMKALALLAD	Homo sapiens
1961	189873	G Protein-Coupled Receptor GPR78	LR37	528	CSLRPPEPERPRFAFTAT	Homo sapiens
1962	189873	G Protein-Coupled Receptor GPR78	LR37	533	RGPLPPGICAHSAQGLRR	Homo sapiens
1963	189873	G Protein-Coupled Receptor GPR78	LR37	534	CRQAQARDLGAPWAVGLRSL	Homo sapiens
1964	189874	Neuromedin U Receptor 2	LR28	420	QQKLEDPFQKHLNSTEE	Homo sapiens
1965	189874	Neuromedin U Receptor 2	LR28	422	KDKSLEADEGNANIQRPC	Homo sapiens
1966	189874	Neuromedin U Receptor 2	LR28	423	SQHDPQLPPAQRNIFLTC	Homo sapiens
1967	189874	Neuromedin U Receptor 2	LR28	487	ILHPRAKLQSTRRALR	Homo sapiens
1968	189884	G Protein-Coupled Receptor Ls189884	LR27	415	CKKRGTKTNLRNQIRSK	Homo sapiens
1969	189884	G Protein-Coupled Receptor Ls189884	LR27	418	EKPSSPSSGKGKTEKAE	Homo sapiens
1970	189884	G Protein-Coupled Receptor Ls189884	LR27	419	PSVQDNDPIPWEHEDQETGE	Homo sapiens
1971	189884	G Protein-Coupled Receptor Ls189884	LR27	486	KKPPTVSESQETPAGNSEG	Homo sapiens
1972	189884	G Protein-Coupled Receptor Ls189884	LR27	1832	LMSEEFREGKGVVK	Homo sapiens
1973	189884	G Protein-Coupled Receptor Ls189884	LR27	1833	GLPDKVPSPEPASIEPK	Homo sapiens
1974	189884	G Protein-Coupled Receptor Ls189884	LR27	1834	PDVEQFWHERDTPSVQ	Homo sapiens
1975	189884	G Protein-Coupled Receptor Ls189884	LR27	1835	RHHEGVEMCLVDVPAVAEE	Homo sapiens
1976	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1685	RVPQTPGPSTASGVPE	Homo sapiens
1977	189895	G Protein-Coupled	AAK12637.1	1686	ETPRQRSESLSRSTMVTS	Homo sapiens



1978	189895	Receptor GPR61	AAK12637.1	1687	SSGAPQITPHRTFGGK	Homo sapiens
1979	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1688	KPAPEEELRLPSREGSIEE	Homo sapiens
1980	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1689	CPSESWVSRPLSPKQE	Homo sapiens
1981	189900	Receptor GPR61				
1982	189900	Spingolipid Receptor Edg8	LR1	312	TGKLRGARYQPGAGLRAD	Homo sapiens
1983	189900	Spingolipid Receptor Edg8	LR1	316	ALERSLTMARRGPAPVSS	Homo sapiens
1984	189900	Spingolipid Receptor Edg8	LR1	317	DGSFSGSERSSPQRDGLD	Homo sapiens
1985	189901	Spingolipid Receptor Edg8	LR1	318	CGRDPGSGQQSASAAEASG	Homo sapiens
		G Protein-Coupled Receptor Ls189901	ENSP000000071589	2266	ASRKAEAIGKLVQGEVS	Homo sapiens
1986	189901	(HEOAD54)				
		G Protein-Coupled Receptor Ls189901	ENSP000000071589	2270	SCLSYRVGTKPSASLR	Homo sapiens
1987	189901	(HEOAD54)				
		G Protein-Coupled Receptor Ls189901	ENSP000000071589	2271	RVDYVLLHETWRFGAAC	Homo sapiens
1988	189901	(HEOAD54)				
		G Protein-Coupled Receptor Ls189901	ENSP000000071589	2272	HQSRAILLGLTRGRQGPVSD	Homo sapiens
1989	189901	(HEOAD54)				
		G Protein-Coupled Receptor Ls189901	ENSP000000071589	2273	CIHTRPWTSNTVFLVSL	Homo sapiens
1990	189901	(HEOAD54)				
		G Protein-Coupled Receptor Ls189901	ENSP000000071589	2274	RGRQGPVSESSYQPSR	Homo sapiens
1991	189904	(HEOAD54)				
		Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2108	IDRYLIKYPFREHLLQKKE	Homo sapiens
1992	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2109	TDNGITCNDFASSGDPN	Homo sapiens
1993	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2110	FLKQRNRQVATALPLE	Homo sapiens
1994	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2111	RNVRIASRLGSWKQYQC	Homo sapiens
1995	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2112	GDHFRDMLMNQLRHNFKS	Homo sapiens

1996	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1721	CVAFPLAVGNPDQLQIPSR	Homo sapiens
1997	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1722	NTLRHNAIRIHSTYPEGIC	Homo sapiens
1998	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1723	QASKLGLMSLQRPFGMSID	Homo sapiens
1999	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1724	DMMPKSKFKFLPQLPGHTKRR	Homo sapiens
2000	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1715	QNLKDPVQIKIKHIRTQE	Homo sapiens
2001	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1716	KNKSGGWNTSGCVAHRD	Homo sapiens
2002	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1717	RNNNEWGKESYGKEKGDE	Homo sapiens
2003	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1718	CGRNGKRSNRTLREEVLR	Homo sapiens
2004	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1719	TSKSKSSSTYFKRNSHTD	Homo sapiens
2005	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1720	DKSLKLAHADGDQTS	Homo sapiens
2006	190026	G Protein-Coupled Receptor JEG18	LR24	407	LFPLRTSDDTPGNRTKC	Homo sapiens
2007	190026	G Protein-Coupled Receptor JEG18	LR24	408	QDKYPMAQDLGEKQKALK	Homo sapiens
2008	190026	G Protein-Coupled Receptor JEG18	LR24	409	SFPLDFLVKSNEIKSC	Homo sapiens
2009	190026	G Protein-Coupled Receptor JEG18	LR24	410	RRRLSRQDLHDSIQLHAK	Homo sapiens
2010	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1725	KGEAKLDSRAKDVTLTIQE	Homo sapiens
2011	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1727	DHKEQPIVTENAERQLVVKD	Homo sapiens
2012	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1728	EDFEEQTLTLFLDGERERK	Homo sapiens
2013	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1729	EGKEGDYIRIPERLLDVQD	Homo sapiens

2014	190168	Receptor VLGR1	AAF27278.1	324	SEAYADGIEGYDILVACSSS	Homo sapiens
2015	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	326	NNILRENQNNQVVKDKKA	Homo sapiens
2016	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	379	DPFLNFSIPVVLFDALT	Homo sapiens
2017	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	380	GKIFSSCFHNTILCMQKE	Homo sapiens
2018	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	327	CPKFVNKILSSHQPLFS	Homo sapiens
2019	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	328	KQHARVISHVPENTKGA	Homo sapiens
2020	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	329	ENTKGAVKKHLSKKDKRKA	Homo sapiens
2021	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	330	CKFHTSFDMMILRLTSI	Homo sapiens
2022	190188	G Protein-Coupled Receptor LGR6	LR36	439	ENHDQDIDELQLEMEDSKP	Homo sapiens
2023	190188	G Protein-Coupled Receptor LGR6	LR36	440	NPHFRDDLRLRPRAGDS	Homo sapiens
2024	190188	G Protein-Coupled Receptor LGR6	LR36	442	EDLHLDDESSKRPLGLLAR	Homo sapiens
2025	190188	G Protein-Coupled Receptor LGR6	LR36	621	DSGPLAYAAAGELEKSSC	Homo sapiens
2026	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1836	CAARRQHALLYNVKRHSLE	Homo sapiens
2027	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1837	DGSLKAKEGSTGTSESSV	Homo sapiens
2028	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1838	CSIDLGEDGMEFEGEDDIN	Homo sapiens
2029	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1839	SEDDVEAVNIPESLPPS	Homo sapiens
2030	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1840	MHTIKKKEIQDMLKKFFC	Homo sapiens
2031	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1841	KEDSHDPLPGTEGGTEG	Homo sapiens
2032	190418	Inflammation-Related G Protein-Coupled Receptor	LR8	343	RQVKRAAQALDQYKLRQAS	Homo sapiens

2033	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	344	RTDEAMPGRFQELDSRLASG	Homo sapiens
2034	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	345	DSSEVGDAQINSKRAKQMAEK	Homo sapiens
2035	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	346	KAQPIKGARRAPDSSEFGK	Homo sapiens
2036	190419	EX33 G Protein-Coupled Receptor Ls190419	CAC33085.1	2716	RRKSNFRLRGYSTGKT	Homo sapiens
2037	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2717	RRQKSSVNYLLALAAAD	Homo sapiens
2038	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2719	CFLTIPYWWPNWT	Homo sapiens
2039	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2725	CSIFFILNSIVYKLR	Homo sapiens
2040	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2754	GRUYSLSFSIPH	Homo sapiens
2041	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2755	FFFLWIHVVDRE	Homo sapiens
2042	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2756	MDPTISTLDTETLP	Homo sapiens
2043	190427	Cysteinyl Leukotriene CYSLT2 Receptor	LR49	471	ASSIMILLDSGSEQNGSVTSC	Homo sapiens
2044	190427	Cysteinyl Leukotriene CYSLT2 Receptor	LR49	472	RVLLKVEVPESGLRVSHRK	Homo sapiens
2045	190427	Cysteinyl Leukotriene CYSLT2 Receptor	LR49	473	KDRLKSALRKGHQKAKTKC	Homo sapiens
2046	190427	Cysteinyl Leukotriene CYSLT2 Receptor	LR49	512	MEPNGTFSNNNSRNC	Homo sapiens
2047	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	2253	CTIENFKREFFPIVYLIF	Homo sapiens
2048	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	2254	GVLGNGLSIYVFLQPYK	Homo sapiens
2049	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	2255	ADYYLRGSNWIFGDLAC	Homo sapiens
2050	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	2256	FRLHVTISRSAWILC	Homo sapiens

2051	190427	Receptor	Cysteinyl Leukotriene CYSLT2 NP_065110.1	2257	CGIIWILIMASSIMLLDSGS	Homo sapiens
2052	190427	Receptor	Cysteinyl Leukotriene CYSLT2 NP_065110.1	2258	CLELNLYKIAKLQTMNYIAL	Homo sapiens
2053	190427	Receptor	Cysteinyl Leukotriene CYSLT2 NP_065110.1	2260	VSHRKALTIITIIILIFFLC	Homo sapiens
2054	190427	Receptor	Cysteinyl Leukotriene CYSLT2 NP_065110.1	2261	CFLPYHTLRTVHLTTWKVGL	Homo sapiens
2055	190427	Receptor	Cysteinyl Leukotriene CYSLT2 NP_065110.1	2262	CKDRLHKALVITLALA	Homo sapiens
2056	190427	Receptor	Cysteinyl Leukotriene CYSLT2 NP_065110.1	2263	YFAGENFKDRILKSALRKG	Homo sapiens
2057	190427	Receptor	Cysteinyl Leukotriene CYSLT2 NP_065110.1	2264	HPQKAKTKCVFPVSVWLKE	Homo sapiens
2058	190437	G Protein-Coupled Receptor C5L2	LR31	429	DSVSYEYGDYSDLSDRPVD	Homo sapiens
2059	190437	G Protein-Coupled Receptor C5L2	LR31	430	RESQGGQDESVDKSKTSHD	Homo sapiens
2060	190437	G Protein-Coupled Receptor C5L2	LR31	431	PSAIYRRRLHQEHFPARLQC	Homo sapiens
2061	190437	G Protein-Coupled Receptor C5L2	LR31	432	CHWALRESQGGQDESVDKSKS	Homo sapiens
2062	190437	G Protein-Coupled Receptor C5L2	NP_060955.1	2818	MGNDSVSVEYGDYSDLSDRPVD	Homo sapiens
2063	190438	G Protein-Coupled Receptor Ls190438	ENSP00000080322	2585	TERLKIRWHTSDNQVRPQAC	Homo sapiens
2064	190484	G Protein-Coupled Receptor Ls190484	LR33	434	EADLGATGHRPRTELDDED	Homo sapiens
2065	190484	G Protein-Coupled Receptor Ls190484	LR33	435	RTCHRRQQQPAACRGFARVAR	Homo sapiens
2066	190484	G Protein-Coupled Receptor Ls190484	LR33	436	EERPGSFTPEPTQTLDSEG	Homo sapiens
2067	190484	G Protein-Coupled Receptor Ls190484	LR33	437	RSDPTAGPQLNPTAQPQSD	Homo sapiens
2068	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1730	RNVTDIDILALERRLLQ	Homo sapiens
2069	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1731	KKKRMAMARRTMIFQKGE	Homo sapiens

2070	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1732	KSVTSASGSENLTQQE	Homo sapiens
2071	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1733	EVDALFEELSRQLFLETAD	Homo sapiens
2072	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1734	DRVGKTDPTVRGIEIT	Homo sapiens
2073	190599	G Protein-Coupled Receptor GPRC5B	O75205	411	VRLPFIKEKEKSPVGLH	Homo sapiens
2074	190599	G Protein-Coupled Receptor GPRC5B	O75205	412	DEHNAALRTAGFPNGSLGKR	Homo sapiens
2075	190599	G Protein-Coupled Receptor GPRC5B	O75205	413	GKRPSGLGKRPSAPFRSNV	Homo sapiens
2076	190599	G Protein-Coupled Receptor GPRC5B	O75205	414	SQPRMRETAFEEDVQLPR	Homo sapiens
2077	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	542	GDPAIYQSLKAQNAYSRLHC	Homo sapiens
2078	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	543	PFSHSSYTVRSKKIFLSKL	Homo sapiens
2079	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	619	GKILLNLTILGMRRKNTCCQN	Homo sapiens
2080	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	620	EEVTTLVQAIRITSVMNE	Homo sapiens
2081	190623	Melanopsin	AAF24978.1	2137	CKNGESLWQRQRLQSE	Homo sapiens
2082	190623	Melanopsin	AAF24978.1	2138	RHSRPYPYSRSTHRST	Homo sapiens
2083	190623	Melanopsin	AAF24978.1	2139	TSHTSNLSWISIRRRQE	Homo sapiens
2084	190623	Melanopsin	AAF24978.1	2140	DLEAKAPRPQGHEAET	Homo sapiens
2085	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1735	KLQRRPVAVDVLLNLTASD	Homo sapiens
2086	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1736	KTRPRLGQAGLVSVAC	Homo sapiens
2087	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1737	EFGSDISHSQGTNGTC	Homo sapiens
2088	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1738	SRLVWILRGSGSHRRQRR	Homo sapiens
2089	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1739	GQWQQESSMELKEQKGG	Homo sapiens
2090	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1740	EEQRADRPAAERTSEHSQGC	Homo sapiens
2091	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	2569	MDTGPDQSYFSGNHWVFVS	Homo sapiens

2092	190701	Receptor GPR41 & GPR42 C-C Chemokine Receptor 11	AAF61299.1	1441	VAIYAYKKQRTKTDV	Homo sapiens
2093	190701	C-C Chemokine Receptor 11	AAF61299.1	1442	VAVTKVPSQSGVGKPCWII	Homo sapiens
2094	190701	C-C Chemokine Receptor 11	AAF61299.1	1443	CNMSKRMDIAIQVTESI	Homo sapiens
2095	190701	C-C Chemokine Receptor 11	AAF61299.1	1444	RQSEVEFFEDSEGTEP	Homo sapiens
2096	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1741	GHPPGSGGAESADTEARVR	Homo sapiens
2097	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1742	HSVASALKSHRTRGHGRGDC	Homo sapiens
2098	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1743	KGGAAVAGGRPTGASARR	Homo sapiens
2099	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1744	CLVRREFRKALKSLWR	Homo sapiens
2100	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1745	RPFTATTKPEHEDQGLQ	Homo sapiens
2101	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	339	AFPPVLDVGTYSHREEDQC	Homo sapiens
2102	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	340	HDRRKMKPVQFVAAVSQIN	Homo sapiens
2103	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	341	RRRLLVDEFKMEKRISR	Homo sapiens
2104	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	342	LRRCFSTILLYCRKSRLPRE	Homo sapiens
2105	190725	G Protein-Coupled Receptor GPR26	LR26	554	PLTLAGVVARRQPAGDRIC	Homo sapiens
2106	190725	G Protein-Coupled Receptor GPR26	LR26	555	CSRRPDERLRFVFTGA	Homo sapiens
2107	190725	G Protein-Coupled Receptor GPR26	LR26	557	CKEILNRLHRRSIHSSG	Homo sapiens
2108	190725	G Protein-Coupled Receptor GPR26	LR26	567	CLEEQKRIRRRQRATKKIST	Homo sapiens
2109	190741	Sreb3	LR9	516	EPEEVSGALSPPSASAYVK	Homo sapiens
2110	190741	Sreb3	LR9	519	NGHAASRLLGMDEVKGEK	Homo sapiens
2111	190741	Sreb3	LR9	526	KKCLRTHAPCWGTGGAPAPR	Homo sapiens
2112	190741	Sreb3	LR9	527	VLMAATHAVVYGKLLLFYR	Homo sapiens

2113	190742	G Protein-Coupled Receptor H7TBA62	LR23	550	RRAPGPPSDTFVFNALAD	Homo sapiens
2114	190742	G Protein-Coupled Receptor H7TBA62	LR23	551	QRRQRRRQDSRVVARSVR	Homo sapiens
2115	190742	G Protein-Coupled Receptor H7TBA62	LR23	552	RREPRQALAGTRDLRSR	Homo sapiens
2116	190742	G Protein-Coupled Receptor H7TBA62	LR23	553	KQVGRRWVASNPRESRPS	Homo sapiens
2117	190743	G Protein-Coupled Receptor GPRC5D	LR32	568	KDCIESTGDFLLCDAEGP	Homo sapiens
2118	190743	G Protein-Coupled Receptor GPRC5D	LR32	569	VENQELSRGTFLGDSGR	Homo sapiens
2119	190743	G Protein-Coupled Receptor GPRC5D	LR32	570	GDSGSREVLLQEKQEKHA	Homo sapiens
2120	190743	G Protein-Coupled Receptor GPRC5D	LR32	571	SMLLRGNPQFQRQPQWDDP	Homo sapiens
2121	190744	G Protein-Coupled Receptor GPRC5C	LR34	529	KVPSEELTSSSHGPPPTAR	Homo sapiens
2122	190744	G Protein-Coupled Receptor GPRC5C	LR34	532	RGSGEGGPGQGNSSAGWAV	Homo sapiens
2123	190744	G Protein-Coupled Receptor GPRC5C	LR34	535	QDTKKRSLGTVQVFLGTT	Homo sapiens
2124	190744	G Protein-Coupled Receptor GPRC5C	LR34	538	KEQKGQSMFVENKAFSMDE	Homo sapiens
2125	190745	G Protein-Coupled Receptor LGR7	LR40	560	TATEIRNQVKKEMILAKR	Homo sapiens
2126	190745	G Protein-Coupled Receptor LGR7	LR40	561	NYRQKRKSMDSKGQKTYAPS	Homo sapiens
2127	190745	G Protein-Coupled Receptor LGR7	LR40	565	SCSNLTVLMRKKNKINHLN	Homo sapiens
2128	190745	G Protein-Coupled Receptor LGR7	LR40	566	DELDLGSNKIENLPPUFKD	Homo sapiens
2129	190748	GPCR Ls190748	LR47	546	QLSSPSRPTQKTLCSLR	Homo sapiens
2130	190748	GPCR Ls190748	LR47	547	DMLKIASMHSGQIRKMEHAG	Homo sapiens
2131	190748	GPCR Ls190748	LR47	548	AGGYRSRTPSPDFKALRTVS	Homo sapiens
2132	190748	GPCR Ls190748	LR47	549	RESSCHIVTSSSEFDG	Homo sapiens
2133	190748	GPCR Ls190748	LR47	1481	GVKKVLTSLFLLSARNC	Homo sapiens
2134	190748	GPCR Ls190748	LR47	1482	NSLLNPLIYAYWQKEVRLQ	Homo sapiens
2135	190749	G Protein-Coupled	LR48	467	RRAALRPPRPARGSRURSD	Homo sapiens



2136	190749	Receptor GPR62	LR48	468	RPVRLALGRLRRALPGPVR	Homo sapiens
2137	190749	G Protein-Coupled Receptor GPR62	LR48	510	DSRLSILPLRLRPLGGK	Homo sapiens
2138	190749	G Protein-Coupled Receptor GPR62	LR48	511	RPPEGPAVGPSEAPEQTPE	Homo sapiens
2139	190749	G Protein-Coupled Receptor GPR62	LR48	2702	VVARRAALRPPRPA	Homo sapiens
2140	190749	G Protein-Coupled Receptor GPR62	LR48	2703	PSEAPEQTPELAGGR	Homo sapiens
2141	190749	G Protein-Coupled Receptor GPR62	LR48	2704	GPSEAPEQTPELAG	Homo sapiens
2142	190774	Histamine H4 Receptor	NP_067637.2	2235	PDINSTINLSLSTRVLAFF	Homo sapiens
2143	190774	Histamine H4 Receptor	NP_067637.2	2237	VVDKNLRHRSSYFFLN	Homo sapiens
2144	190774	Histamine H4 Receptor	NP_067637.2	2240	LYPHITLFEWDFGKEIC	Homo sapiens
2145	190774	Histamine H4 Receptor	NP_067637.2	2242	TQHTGVLIKIVILMVAV	Homo sapiens
2146	190774	Histamine H4 Receptor	NP_067637.2	2243	VNGPMILVSESWKDEGSEC	Homo sapiens
2147	190774	Histamine H4 Receptor	NP_067637.2	2244	CEPGFFSEWYLAITSFL	Homo sapiens
2148	190774	Histamine H4 Receptor	NP_067637.2	2245	AYFNMINIYWSLWKRDHLRC	Homo sapiens
2149	190774	Histamine H4 Receptor	NP_067637.2	2246	CGHSFRGRLSSRRSL	Homo sapiens
2150	190774	Histamine H4 Receptor	NP_067637.2	2247	IASKMGFSQSDSVLHQRE	Homo sapiens
2151	190774	Histamine H4 Receptor	NP_067637.2	2249	IVLSFYSSATGPKSVWYRIA	Homo sapiens
2152	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2085	IIRVTVPKGTGTAC	Homo sapiens
2153	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2086	SPWTNDPKERINVAVA	Homo sapiens
2154	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2087	RIRELLQGMVKEIGIAVD	Homo sapiens
2155	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2088	TQTSDIATNSTLPSAE	Homo sapiens
2156	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	481	TEVPDSAGTSNTHITSAS	Homo sapiens
2157	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	522	GDTAVERLNVFTIMAKV	Homo sapiens
2158	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	523	MSLAKRVMTGLWIFTI	Homo sapiens
2159	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	525	LHFIFGFTVPMISITV	Homo sapiens

2160	190948	like 2 (FPRL2)	NP_038475.1	1658	DELLEAPGDLETLPRLQHC	Homo sapiens
2161	190948	EMR2 Hormone Receptor	NP_038475.1	1659	CVASHLLDGLIEDVLRGLSKN	Homo sapiens
2162	190948	EMR2 Hormone Receptor	NP_038475.1	1660	KSGDPGPSVVGVLSPG	Homo sapiens
2163	190948	EMR2 Hormone Receptor	NP_038475.1	1661	SKGIRKLKTESEMHILSS	Homo sapiens
2164	190948	EMR2 Hormone Receptor	NP_038475.1	1662	ELSLEVQKQVDRSVTLRQNG	Homo sapiens
2165	190948	EMR2 Hormone Receptor	NP_038475.1	1663	EPEKQMLLHETHGQLLDGS	Homo sapiens
2166	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1492	KRMQKRSVTALMVLNLALAD	Homo sapiens
2167	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1493	RPFVSGKLRTKAMARR	Homo sapiens
2168	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1494	ASYSDIGRRRLQARRFR	Homo sapiens
2169	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1495	LEGTGSEASSTRRGGG	Homo sapiens
2170	191039	Trace Amine Receptor 1 (TA1)	LR122	2039	RKALKMMLFGKIFQKDSRC	Homo sapiens
2171	191039	Trace Amine Receptor 1 (TA1)	LR122	2040	QIGLEMKNGISQSKERKAV	Homo sapiens
2172	191039	Trace Amine Receptor 1 (TA1)	LR122	2041	RIYUAKAQARLSDANQK	Homo sapiens
2173	191039	Trace Amine Receptor 1 (TA1)	LR122	2042	ELNFKGAEEIYKHHVC	Homo sapiens
2174	191039	Trace Amine Receptor 1 (TA1)	LR122	2043	CVKNINWSNDVRASLYS	Homo sapiens
2175	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1569	SAEPPADWDGAGGSYRLRG	Homo sapiens
2176	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1571	GIVRRVRVSVKRVSVLN	Homo sapiens
2177	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1572	RNEEFRRSVRSVLPGVGDA	Homo sapiens
2178	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1573	CEEEESWAGRRIPVSLLYSG	Homo sapiens
2179	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1651	CYLGIVRRVRVSVKRVSV	Homo sapiens
2180	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1544	KELYRSYVTRGVGVKVP	Homo sapiens
2181	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1545	ILTNRQPRDKNVKKCS	Homo sapiens

2182	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1546	CPNSATSLSQDNRIKKEQDGG	Homo sapiens
2183	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1570	TTRPFKTSNPKNLLGAK	Homo sapiens
2184	191193	Trace Amine Receptor 3 (TA3)	LR88	1969	ANEEGIEELVVA	Homo sapiens
2185	191193	Trace Amine Receptor 3 (TA3)	LR88	2316	RKIESTASQAQSS	Homo sapiens
2186	191193	Trace Amine Receptor 3 (TA3)	LR88	2571	LVDAVIDAYMNF	Homo sapiens
2187	191193	Trace Amine Receptor 3 (TA3)	LR88	2573	RTDSSITNLFSEEVET	Homo sapiens
2188	191196	G Protein-Coupled Receptor GPR80	IP_13092	1864	NASDFPDYAAAFGNCTDE	Homo sapiens
2189	191196	G Protein-Coupled Receptor GPR80	IP_13092	1865	TFLITNTRNRSACLD	Homo sapiens
2190	191196	G Protein-Coupled Receptor GPR80	IP_13092	1866	TLIHGLQTDCLKQKARR	Homo sapiens
2191	191196	G Protein-Coupled Receptor GPR80	IP_13092	1867	RLLSISCSIQIHEA	Homo sapiens
2192	191196	G Protein-Coupled Receptor GPR80	IP_13092	1868	QQAVCSTVRCKVSGNLE	Homo sapiens
2193	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2749	QDIAEVDHSEGCF	Homo sapiens
2194	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2750	RKQWRLQQPILKLA	Homo sapiens
2195	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2751	CSISINFPSFTTVMTC	Homo sapiens
2196	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2752	QWFLILWIWKDSVD	Homo sapiens
2197	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2575	AFLSDNTIEVRINRTLKK	Homo sapiens
2198	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2576	QETKNEFRNLKQIQSKC	Homo sapiens
2199	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2577	CNNKTHWAPVRSTM	Homo sapiens
2200	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2581	TKMAEYDLQNDVFIIPD	Homo sapiens
2201	193511	EGF-Like Module-Containing	AAK15076.1	1665	CQDITSSKTEGRKELQKIV	Homo sapiens

2202	193511	Mucin-Like Receptor EMR3	EGF-Like Module-Containing	AAK15076.1	1666	RDVESKVLEIALKDPEQK	Homo sapiens
2203	193511	Mucin-Like Receptor EMR3	EGF-Like Module-Containing	AAK15076.1	1667	KIQNDSVAIETQAITDNC	Homo sapiens
2204	193511	Mucin-Like Receptor EMR3	EGF-Like Module-Containing	AAK15076.1	1668	CSEERKTFNLNVQMNSMDIR	Homo sapiens
2205	193511	Mucin-Like Receptor EMR3	EGF-Like Module-Containing	AAK15076.1	1669	EEMDKKDQVYVYNSQVVSAA	Homo sapiens
2206	193511	Mucin-Like Receptor EMR3	EGF-Like Module-Containing	AAK15076.1	1670	SKSVTLTFQHVVMTPSTK	Homo sapiens
2207	193516	Mucin-Like Receptor EMR3	G Protein-Coupled	CAC21687.1	2142	CLLLPTAVIVFSYVKIIAK	Homo sapiens
2208	193516	Receptor dJ402H5.1	G Protein-Coupled	CAC21687.1	2144	RPDSPIQLSWPTLLA	Homo sapiens
2209	193516	Receptor dJ402H5.1	G Protein-Coupled	CAC21687.1	2145	CQTGGLKATKKKSLEG	Homo sapiens
2210	193516	Receptor dJ402H5.1	G Protein-Coupled	CAC21687.1	2146	RLHTVTVRKSSAVLE	Homo sapiens
2211	193516	Receptor dJ402H5.1	G Protein-Coupled	CAC21687.1	2620	PTAVIVFSYVKIIAKV	Homo sapiens
2212	193524	Receptor dJ402H5.1	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	1947	KLAQRLREVTGHTDHYFSQD	Homo sapiens
2213	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	1948	CALQTWGSERRRLGDTSKD	Homo sapiens
2214	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2734	RGRRQSARNSRGPPEQPNNE	Homo sapiens
2215	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2735	RNSRGPPEQPNNEELG	Homo sapiens
2216	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2736	AQVREDVRPHTVVLRL	Homo sapiens
2217	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2742	QLDQVPSRHPSPRE	Homo sapiens

2218	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2744	LDLSRSSNSREQLDQV	Homo sapiens
2219	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1903	REEHHFMDARNRSYPLYSC	Homo sapiens
2220	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1904	PGPAPGGEEAADPRASRR	Homo sapiens
2221	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1905	CPRPSGSHKEAYSERPGGLL	Homo sapiens
2222	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1906	PSSGAPRPGRPLRNGRVA	Homo sapiens
2223	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2018	FLGNDDIKTKKELIVN	Homo sapiens
2224	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2019	QVTYRDSKEKRDLRNFLK	Homo sapiens
2225	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2020	CERTKIWGTFKINERFTND	Homo sapiens
2226	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2021	SKYANGIEIQLKKAYER	Homo sapiens
2227	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2022	CIVVFIVRTSLHAP	Homo sapiens
2228	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2023	KILALFWFDSREISFEAC	Homo sapiens
2229	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2024	CVHQDVMKLAYADTLP	Homo sapiens
2230	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2027	RFGNSLHPIVRVVMGD	Homo sapiens
2231	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2028	KTKQIRTRVLAMFKISC	Homo sapiens
2232	194743	FLJ14454	LR77	1855	KTDENEQDQSASVDMVFSP	Homo sapiens
2233	194743	FLJ14454	LR77	1856	KKDYQYPKSLDILSNVGC	Homo sapiens
2234	194743	FLJ14454	LR77	1857	KNLQTSDDGDIINIDFNN	Homo sapiens
2235	194743	FLJ14454	LR77	1858	SGNGNPNQWELDYRQEKIC	Homo sapiens
2236	194743	FLJ14454	LR77	1859	RPRLRVKMYNFLRSLPTLHE	Homo sapiens
2237	194745	G Protein-Coupled Receptor SLI/MCH2	AAK32193.1	1845	CNPSVPKQRVMKLTIM	Homo sapiens
2238	194745	G Protein-Coupled Receptor SLI/MCH2	AAK32193.1	1846	RLTRWRTRYKTIRINLG	Homo sapiens
2239	194745	G Protein-Coupled Receptor SLI/MCH2	AAK32193.1	1847	KDGVESCAFDLTSPDDVL	Homo sapiens
2240	194745	G Protein-Coupled Receptor SLI/MCH2	AAK32193.1	1848	LSGNFQKRLPQIQRRATE	Homo sapiens

2241	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1849	TIIRSRKKTVPDIYIC	Homo sapiens
2242	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1907	RRATEKEINNMGNTLKSHF	Homo sapiens
2243	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2089	CRIEGDTISQVMPPLLIVA	Homo sapiens
2244	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2090	RRHWAFGDIPCRVGLFTL	Homo sapiens
2245	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2091	CEFIMESANGWHDIM	Homo sapiens
2246	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2092	CSFKIVWSLRRRQQLARQAR	Homo sapiens
2247	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2093	RRRQQLARQARMKKATR	Homo sapiens
2248	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2094	TPSSACDPSVHGALH	Homo sapiens
2249	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2095	CSLKPQPGHSGTKQRPEEM	Homo sapiens
2250	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2096	CISVANSFQSGSDGQWD	Homo sapiens
2251	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2034	RTRKQHSEATNSSNRVFC	Homo sapiens
2252	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2035	RVISQISADNYKIHGDPSA	Homo sapiens
2253	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2036	TSSARTSNAKPFHSD	Homo sapiens
2254	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2037	NGTRPGMASTKLSPWD	Homo sapiens
2255	194858	G Protein-Coupled Receptor Ls194858	LR84	1933	LGIAWDRRLRSPAGC	Homo sapiens
2256	194858	G Protein-Coupled Receptor Ls194858	LR84	1934	GERYMAVLRPLQPPGS	Homo sapiens
2257	194858	G Protein-Coupled Receptor Ls194858	LR84	1935	CRDEPSALARALTWRQAR	Homo sapiens
2258	194858	G Protein-Coupled Receptor Ls194858	LR84	1936	AAQRCLQGLWGRASRD	Homo sapiens
2259	194858	G Protein-Coupled Receptor Ls194858	LR84	1937	RDSPGPSIAYHPSSQSSVD	Homo sapiens
2260	194878	MigX3 G Protein-Coupled	AAK91806.1	2748	ALFSRIHLDWKVLF	Homo sapiens

2261	194903	Receptor G Protein-Coupled Receptor GPCR83	ENSP00000198236	1991	CIAFKDIMPFSQVGVDER	Homo sapiens
2262	194903	G Protein-Coupled Receptor GPCR83	ENSP00000198236	1992	KAFEEAYARADKKAPRPC	Homo sapiens
2263	194903	G Protein-Coupled Receptor GPCR83	ENSP00000198236	1993	ETKIQWHGKDNQVPKSVCS	Homo sapiens
2264	194903	G Protein-Coupled Receptor GPCR83	ENSP00000198236	1994	CSYLGKDLPENVNEAK	Homo sapiens
2265	194904	WO0034334-hFB41A	LR114	2011	SDYDMPLEDEDEDVINS	Homo sapiens
2266	194904	WO0034334-hFB41A	LR114	2014	NPHGAHATSPFNFSY	Homo sapiens
2267	194905	G Protein-Coupled Receptor MGC7035	LR112	1986	ERALPRTYMASVYNTRHVC	Homo sapiens
2268	194905	G Protein-Coupled Receptor MGC7035	LR112	1987	CAKMQNAEAAADATLVF	Homo sapiens
2269	194905	G Protein-Coupled Receptor MGC7035	LR112	1988	DRDTGRLEPSAHLVATVC	Homo sapiens
2270	194905	G Protein-Coupled Receptor MGC7035	LR112	1989	RYMNGSFPSKQLRLMKKLPC	Homo sapiens
2271	194907	G Protein-Coupled Receptor 14273	LR116	2003	CARAAGDAPLSLEQANRTR	Homo sapiens
2272	194907	G Protein-Coupled Receptor 14273	LR116	2004	VISYSKILQITKASRKRL	Homo sapiens
2273	194907	G Protein-Coupled Receptor 14273	LR116	2005	TVSLAYSRSHQIRVSQQD	Homo sapiens
2274	194907	G Protein-Coupled Receptor 14273	LR116	2006	CTWFPEKGAILDTSVKRND	Homo sapiens
2275	194908	G Protein-coupled Receptor Gpcrb4	LR117	2007	TYGRDNGQLLGERVARRDIC	Homo sapiens
2276	194908	G Protein-coupled Receptor Gpcrb4	LR117	2008	QETLPTLQPNQNMTEERQR	Homo sapiens
2277	194908	G Protein-coupled Receptor Gpcrb4	LR117	2009	RTSQSYTCNQECDNCLNAT	Homo sapiens
2278	194908	G Protein-coupled Receptor Gpcrb4	LR117	2010	RPQSHPRTPDDPKITIVSC	Homo sapiens
2279	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2312	VARRQAKKIENTGSKT	Homo sapiens
2280	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2313	KVITGQVLKNSSA	Homo sapiens

2281	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2318	MSSNSSLLVAVQLC	Homo sapiens
2282	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2307	IAKQQAIIETSSKV	Homo sapiens
2283	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2314	MTSNFSQPVVQLC	Homo sapiens
2284	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2319	KULSGDVLKAS	Homo sapiens
2285	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2570	SGDVLKASSISLFLE	Homo sapiens
2286	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2727	QDKPEVDKGGGQLPEESL	Homo sapiens
2287	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2728	LINISHLIRKILVS	Homo sapiens
2288	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2729	MDPTVPVFGTKL	Homo sapiens
2289	195015	G Protein-Coupled Receptor GPR82	AAL26482	2706	RYATLMQKDSQETT	Homo sapiens
2290	195015	G Protein-Coupled Receptor GPR82	AAL26482	2707	KIFYGHLLKKFRQPNF	Homo sapiens
2291	195015	G Protein-Coupled Receptor GPR82	AAL26482	2708	YSVIEATEGEESLC	Homo sapiens
2292	195015	G Protein-Coupled Receptor GPR82	AAL26482	2715	CTSIMEKDLTYSSVKR	Homo sapiens



SEQ ID NO:	LS_ID	Gene	Antibody Company Name
1	127	5-HT1A Receptor	Chemicon
1	127	5-HT1A Receptor	Research Diagnostics
1	127	5-HT1A Receptor	Santa Cruz
3	128	5-HT1B Receptor	Chemicon
3	128	5-HT1B Receptor	Research Diagnostics
3	128	5-HT1B Receptor	Santa Cruz
5	129	5-HT1D Receptor	Research Diagnostics
5	129	5-HT1D Receptor	Santa Cruz
11	132	5-HT2A Receptor	Calbiochem
11	132	5-HT2A Receptor	Research Diagnostics
13	133	5-HT2B Receptor	Research Diagnostics
15	134	5-HT2C Receptor	Research Diagnostics
15	134	5-HT2C Receptor	Santa Cruz
21	139	5-HT7 Receptor	Calbiochem
23	272	Adenosine A1 Receptor	Alpha Diagnostic Int.
23	272	Adenosine A1 Receptor	Calbiochem
23	272	Adenosine A1 Receptor	Santa Cruz
25	273	Adenosine A2a Receptor	Alpha Diagnostic Int.
25	273	Adenosine A2a Receptor	Calbiochem
25	273	Adenosine A2a Receptor	Chemicon
25	273	Adenosine A2a Receptor	Santa Cruz
27	274	Adenosine A2b Receptor	Alpha Diagnostic Int.
27	274	Adenosine A2b Receptor	Chemicon
27	274	Adenosine A2b Receptor	Santa Cruz
29	275	Adenosine A3 Receptor	Alpha Diagnostic Int.
29	275	Adenosine A3 Receptor	Santa Cruz
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Alpha Diagnostic Int.
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Chemicon
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Research Diagnostics
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Santa Cruz
35	377	Alpha 1b-adrenoceptor	Research Diagnostics
35	377	Alpha 1b-adrenoceptor	Santa Cruz
37	379	Alpha 1c-adrenoceptor	Research Diagnostics
37	379	Alpha 1c-adrenoceptor	Santa Cruz
39	387	Alpha 2a-adrenoceptor	Calbiochem
39	387	Alpha 2a-adrenoceptor	Santa Cruz
41	388	Alpha 2b-adrenoceptor	Research Diagnostics
41	388	Alpha 2b-adrenoceptor	Santa Cruz
43	389	Alpha 2c-adrenoceptor	Research Diagnostics
43	389	Alpha 2c-adrenoceptor	Santa Cruz
45	599	Bradykinin B1 Receptor	Research Diagnostics
49	635	Beta-1 adrenoceptor	Calbiochem
49	635	Beta-1 adrenoceptor	Research Diagnostics

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49	635	Beta-1 adrenoceptor	Santa Cruz
51	640	Beta-2 adrenoceptor	Research Diagnostics
51	640	Beta-2 adrenoceptor	Santa Cruz
53	643	Beta-3 adrenoceptor	Alpha Diagnostic Int.
53	643	Beta-3 adrenoceptor	Chemicon
53	643	Beta-3 adrenoceptor	Research Diagnostics
53	643	Beta-3 adrenoceptor	Santa Cruz
57	692	Bombesin Receptor Subtype-3	Alpha Diagnostic Int.
57	692	Bombesin Receptor Subtype-3	Chemicon
59	729	CXC Chemokine Receptor 5	Research Diagnostics
59	729	CXC Chemokine Receptor 5	Santa Cruz
61	735	C-C Chemokine Receptor 1	Calbiochem
61	735	C-C Chemokine Receptor 1	Capralogics
61	735	C-C Chemokine Receptor 1	Chemicon
61	735	C-C Chemokine Receptor 1	Research Diagnostics
61	735	C-C Chemokine Receptor 1	Santa Cruz
63	737	C-C Chemokine Receptor 3	Research Diagnostics
63	737	C-C Chemokine Receptor 3	Santa Cruz
65	738	C-C Chemokine Receptor 4	Capralogics
65	738	C-C Chemokine Receptor 4	Research Diagnostics
65	738	C-C Chemokine Receptor 4	Santa Cruz
67	741	C-C Chemokine Receptor 7	Research Diagnostics
67	741	C-C Chemokine Receptor 7	Santa Cruz
69	742	C-C Chemokine Receptor 8	Chemicon
70	742	C-C Chemokine Receptor 8	Chemicon
71	742	C-C Chemokine Receptor 8	Chemicon
73	752	CXC Chemokine Receptor 3	Research Diagnostics
73	752	CXC Chemokine Receptor 3	Santa Cruz
73	752	CXC Chemokine Receptor 3	Zymed
75	753	CXC Chemokine Receptor 4	Biosource
75	753	CXC Chemokine Receptor 4	Calbiochem
75	753	CXC Chemokine Receptor 4	Capralogics
75	753	CXC Chemokine Receptor 4	Chemicon
75	753	CXC Chemokine Receptor 4	eBioscience
75	753	CXC Chemokine Receptor 4	Research Diagnostics
75	753	CXC Chemokine Receptor 4	Santa Cruz
77	755	Complement Component 3a Receptor 1	Chemokine.com
79	758	Complement Component 5a Receptor 1	Santa Cruz
83	832	Cannabinoid Receptor 1	Alpha Diagnostic Int.
83	832	Cannabinoid Receptor 1	Biosource
83	832	Cannabinoid Receptor 1	Calbiochem
83	832	Cannabinoid Receptor 1	Cayman
83	832	Cannabinoid Receptor 1	Chemicon
83	832	Cannabinoid Receptor 1	Santa Cruz
85	833	Cannabinoid Receptor 2	Alpha Diagnostic Int.
85	833	Cannabinoid Receptor 2	Calbiochem
85	833	Cannabinoid Receptor 2	Cayman
85	833	Cannabinoid Receptor 2	Chemicon
85	833	Cannabinoid Receptor 2	Santa Cruz
97	1240	Dopamine Receptor D1	Alpha Diagnostic Int.
97	1240	Dopamine Receptor D1	Biogenesis

97	1240	Dopamine Receptor D1	Calbiochem
97	1240	Dopamine Receptor D1	Chemicon
97	1240	Dopamine Receptor D1	FabGennix through Abcam
97	1240	Dopamine Receptor D1	Research Diagnostics
97	1240	Dopamine Receptor D1	Santa Cruz
99	1241	Dopamine Receptor D5	Alpha Diagnostic Int.
99	1241	Dopamine Receptor D5	Biogenesis
99	1241	Dopamine Receptor D5	Calbiochem
99	1241	Dopamine Receptor D5	Chemicon
99	1241	Dopamine Receptor D5	Santa Cruz
101	1242	Dopamine Receptor D2	Alpha Diagnostic Int.
101	1242	Dopamine Receptor D2	Biogenesis
101	1242	Dopamine Receptor D2	Calbiochem
101	1242	Dopamine Receptor D2	Chemicon
101	1242	Dopamine Receptor D2	DPC Biermann/Acris
101	1242	Dopamine Receptor D2	FabGennix through Abcam
101	1242	Dopamine Receptor D2	Research Diagnostics
101	1242	Dopamine Receptor D2	Santa Cruz
103	1243	Dopamine Receptor D3	Alpha Diagnostic Int.
103	1243	Dopamine Receptor D3	Biogenesis
103	1243	Dopamine Receptor D3	Calbiochem
103	1243	Dopamine Receptor D3	Chemicon
103	1243	Dopamine Receptor D3	Research Diagnostics
103	1243	Dopamine Receptor D3	Santa Cruz
103	1243	Dopamine Receptor D3	Zymed
105	1244	Dopamine Receptor D4	Alpha Diagnostic Int.
105	1244	Dopamine Receptor D4	Biogenesis
105	1244	Dopamine Receptor D4	Calbiochem
105	1244	Dopamine Receptor D4	Chemicon
105	1244	Dopamine Receptor D4	DPC Biermann/Acris
105	1244	Dopamine Receptor D4	Santa Cruz
107	1267	Opioid Receptor, delta 1 (OPRD1)	Biosource
107	1267	Opioid Receptor, delta 1 (OPRD1)	Calbiochem
107	1267	Opioid Receptor, delta 1 (OPRD1)	DPC Biermann/Acris
107	1267	Opioid Receptor, delta 1 (OPRD1)	Santa Cruz
113	1486	Endothelin B Receptor	Biogenesis
113	1486	Endothelin B Receptor	Capralogics
113	1486	Endothelin B Receptor	DPC Biermann/Acris
113	1486	Endothelin B Receptor	Fitzgerald Industries Int.
113	1486	Endothelin B Receptor	Research Diagnostics
115	1488	Endothelin A Receptor	Biogenesis
115	1488	Endothelin A Receptor	Capralogics
115	1488	Endothelin A Receptor	DPC Biermann/Acris
115	1488	Endothelin A Receptor	Fitzgerald Industries Int.
115	1488	Endothelin A Receptor	Research Diagnostics
117	1598	Calcium-Sensing Receptor (CASR)	Chemicon
117	1598	Calcium-Sensing Receptor (CASR)	DPC Biermann/Acris

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121	1681	Follicle Stimulating Hormone Receptor	Biogenesis
121	1681	Follicle Stimulating Hormone Receptor	DPC Biermann/Acris
121	1681	Follicle Stimulating Hormone Receptor	Santa Cruz
125	1762	Galanin Receptor GalR1	Alpha Diagnostic Int.
135	1925	Gonadotropin-Releasing Hormone Receptor	Biocarta
135	1925	Gonadotropin-Releasing Hormone Receptor	Lab Vision Corporation/NeoMarkers
135	1925	Gonadotropin-Releasing Hormone Receptor	Research Diagnostics
135	1925	Gonadotropin-Releasing Hormone Receptor	Santa Cruz
139	1951	Growth Hormone Secretagogue Receptor	Santa Cruz
143	2120	Histamine H1 Receptor	Alpha Diagnostic Int.
143	2120	Histamine H1 Receptor	Chemicon
145	2121	Histamine H2 Receptor	Alpha Diagnostic Int.
145	2121	Histamine H2 Receptor	Chemicon
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Biosource
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Calbiochem
147	2783	Opioid Receptor, kappa 1 (OPRK1)	DPC Biermann/Acris
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Santa Cruz
151	2976	Lysophosphatidic Acid Receptor Edg2	Exalpha Biologicals
155	3057	Melanocortin 3 Receptor (MC3R)	Alpha Diagnostic Int.
155	3057	Melanocortin 3 Receptor (MC3R)	Chemicon
155	3057	Melanocortin 3 Receptor (MC3R)	Research Diagnostics
155	3057	Melanocortin 3 Receptor (MC3R)	Santa Cruz
157	3058	Melanocortin 4 Receptor (MC4R)	Alpha Diagnostic Int.
157	3058	Melanocortin 4 Receptor (MC4R)	Chemicon
157	3058	Melanocortin 4 Receptor (MC4R)	Research Diagnostics
157	3058	Melanocortin 4 Receptor (MC4R)	Santa Cruz
159	3059	Melanocortin 5 Receptor (MC5R)	Alpha Diagnostic Int.
159	3059	Melanocortin 5 Receptor (MC5R)	Chemicon
159	3059	Melanocortin 5 Receptor (MC5R)	Research Diagnostics

159	3059	Melanocortin 5 Receptor (MC5R)	Santa Cruz
161	3061	Melanocortin 1 Receptor (MC1R)	Alpha Diagnostic Int.
161	3061	Melanocortin 1 Receptor (MC1R)	Chemicon
161	3061	Melanocortin 1 Receptor (MC1R)	Research Diagnostics
161	3061	Melanocortin 1 Receptor (MC1R)	Santa Cruz
169	3093	Metabotropic Glutamate Receptor 1	Chemicon
171	3094	Metabotropic Glutamate Receptor 2	Chemicon
173	3095	Metabotropic Glutamate Receptor 3	Chemicon
175	3096	Metabotropic Glutamate Receptor 4	Zymed
177	3097	Metabotropic Glutamate Receptor 5	Chemicon
183	3100	Metabotropic Glutamate Receptor 8	Chemicon
185	3212	Opioid mu-type Receptor	Biosource
185	3212	Opioid mu-type Receptor	Calbiochem
185	3212	Opioid mu-type Receptor	Chemicon
185	3212	Opioid mu-type Receptor	DPC Biermann/Acris
185	3212	Opioid mu-type Receptor	Santa Cruz
187	3223	Muscarinic acetylcholine Receptor M1	Biogenesis
187	3223	Muscarinic acetylcholine Receptor M1	Calbiochem
187	3223	Muscarinic acetylcholine Receptor M1	Chemicon
187	3223	Muscarinic acetylcholine Receptor M1	Santa Cruz
189	3224	Muscarinic acetylcholine Receptor M2	Biogenesis
189	3224	Muscarinic acetylcholine Receptor M2	Calbiochem
189	3224	Muscarinic acetylcholine Receptor M2	Chemicon
189	3224	Muscarinic acetylcholine Receptor M2	Santa Cruz
191	3226	Muscarinic acetylcholine Receptor M4	Biogenesis
192	3226	Muscarinic acetylcholine Receptor M4	Biogenesis
191	3226	Muscarinic acetylcholine Receptor M4	Chemicon
192	3226	Muscarinic acetylcholine Receptor M4	Chemicon
191	3226	Muscarinic acetylcholine Receptor M4	Santa Cruz

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192	3226	Muscarinic acetylcholine Receptor M4	Santa Cruz
194	3227	Muscarinic Acetylcholine Receptor M5	Biogenesis
194	3227	Muscarinic Acetylcholine Receptor M5	Santa Cruz
200	3404	Neuropeptide Y Receptor Type 2	Biogenesis
202	3405	Neuropeptide Y Receptor Type 4	Biogenesis
206	3408	Neurotensin Receptor Type 1	Santa Cruz
208	3452	Opiate Receptor-Like 1 (OPRL1)	Santa Cruz
214	3582	Oxytocin Receptor	Santa Cruz
216	3589	Purinergic Receptor P2Y, G-protein coupled, 2 (P2RY2)	Chemicon
216	3589	Purinergic Receptor P2Y, G-protein coupled, 2 (P2RY2)	Zymed
218	3595	Purinergic Receptor P2Y1	Chemicon
218	3595	Purinergic Receptor P2Y1	Zymed
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Biocarta
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Lab Vision Corporation/NeoMarkers
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Santa Cruz
236	3846	Sphingolipid Receptor Edg1	Exalpa Biologicals
238	3847	Sphingolipid Receptor Edg3	Exalpa Biologicals
240	3848	C-C Chemokine Receptor 9	Research Diagnostics
248	3852	CX3C Chemokine Fractalkine Receptor 1	Chemicon
248	3852	CX3C Chemokine Fractalkine Receptor 1	Chemokine.com
248	3852	CX3C Chemokine Fractalkine Receptor 1	eBioscience
250	3853	G Protein-Coupled Receptor GPR15	Santa Cruz
264	3860	G Protein-Coupled Receptor SLC/MCH1	Alpha Diagnostic Int.
264	3860	G Protein-Coupled Receptor SLC/MCH1	Santa Cruz
295	3927	Prostaglandin E Receptor EP4	Cayman
299	4051	Proteinase-Activated Receptor 2	Research Diagnostics
299	4051	Proteinase-Activated Receptor 2	Santa Cruz
301	4052	Proteinase-Activated Receptor 3	Research Diagnostics
301	4052	Proteinase-Activated Receptor 3	Santa Cruz
305	4254	Rhodopsin	Biocarta
305	4254	Rhodopsin	DPC Biermann/Acris
311	4480	Somatostatin Receptor Type 1	Santa Cruz

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313	4481	Somatostatin Receptor Type 2	Biogenesis
313	4481	Somatostatin Receptor Type 2	Santa Cruz
315	4482	Somatostatin Receptor Type 3	Santa Cruz
317	4483	Somatostatin Receptor Type 4	Santa Cruz
319	4484	Somatostatin Receptor Type 5	Santa Cruz
321	4552	Tachykinin Receptor 1	Santa Cruz
323	4687	Thrombin Receptor	DPC Biermann/Acris
323	4687	Thrombin Receptor	Research Diagnostics
323	4687	Thrombin Receptor	Santa Cruz
325	4734	Thyrotropin Releasing Hormone Receptor	Santa Cruz
327	4944	Angiotensin II Type 1 Receptor	Alpha Diagnostic Int.
327	4944	Angiotensin II Type 1 Receptor	Biocarta
327	4944	Angiotensin II Type 1 Receptor	Biogenesis
327	4944	Angiotensin II Type 1 Receptor	Capralogics
327	4944	Angiotensin II Type 1 Receptor	Chemicon
327	4944	Angiotensin II Type 1 Receptor	DPC Biermann/Acris
327	4944	Angiotensin II Type 1 Receptor	Fitzgerald Industries Int.
327	4944	Angiotensin II Type 1 Receptor	Fitzgerald Industries Int.
327	4944	Angiotensin II Type 1 Receptor	Lab Vision Corporation/NeoMarkers
327	4944	Angiotensin II Type 1 Receptor	Santa Cruz
329	4946	Angiotensin II Type 2 Receptor	Alpha Diagnostic Int.
329	4946	Angiotensin II Type 2 Receptor	DPC Biermann/Acris
329	4946	Angiotensin II Type 2 Receptor	Santa Cruz
331	5072	Pyrimidinergic Receptor P2Y4	Chemicon
333	5117	Vasopressin V1A Receptor	Chemicon
335	5118	Vasopressin V1B Receptor	Alpha Diagnostic Int.
335	5118	Vasopressin V1B Receptor	Chemicon
337	5119	Vasopressin V2 Receptor	Alpha Diagnostic Int.
337	5119	Vasopressin V2 Receptor	Chemicon
337	5119	Vasopressin V2 Receptor	Research Diagnostics
347	6031	SIV/HIV Receptor BONZO	Santa Cruz
349	6204	Lysophosphatidic Acid Receptor Edg4	Exalpha Biologicals
351	6213	C-C Chemokine Receptor 5	Calbiochem
351	6213	C-C Chemokine Receptor 5	Capralogics
351	6213	C-C Chemokine Receptor 5	Chemicon
351	6213	C-C Chemokine Receptor 5	Research Diagnostics
351	6213	C-C Chemokine Receptor 5	Santa Cruz
361	6853	Purinergic Receptor P2Y11	Zymed

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365	7221	Galanin Receptor GalR2	Alpha Diagnostic Int.
367	7246	Orexin Receptor 1	Alpha Diagnostic Int.
369	7247	Orexin Receptor 2	Alpha Diagnostic Int.
371	8436	Platelet-Activating Factor Receptor	Cayman
371	8436	Platelet-Activating Factor Receptor	Santa Cruz
377	9421	Neuropeptide Y Receptor Type 1	Biogenesis
377	9421	Neuropeptide Y Receptor Type 1	DPC Biermann/Acris
379	9834	Corticotropin releasing factor Receptor 1	Research Diagnostics
379	9834	Corticotropin releasing factor Receptor 1	Santa Cruz
385	14198	Interleukin-8 Receptor B	Biosource
385	14198	Interleukin-8 Receptor B	R&D Systems
385	14198	Interleukin-8 Receptor B	Research Diagnostics
385	14198	Interleukin-8 Receptor B	Santa Cruz
387	14641	Calcitonin Receptor	Santa Cruz
389	16041	C-C Chemokine Receptor 6	Research Diagnostics
389	16041	C-C Chemokine Receptor 6	Santa Cruz
391	16599	Smoothened	Research Diagnostics
391	16599	Smoothened	Santa Cruz
397	17535	Gaba(b) Receptor 1	Alpha Diagnostic Int.
397	17535	Gaba(b) Receptor 1	Calbiochem
397	17535	Gaba(b) Receptor 1	Chemicon
397	17535	Gaba(b) Receptor 1	Santa Cruz
423	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	Santa Cruz
435	54053	Gaba(b) Receptor 2	Alpha Diagnostic Int.
435	54053	Gaba(b) Receptor 2	Chemicon
439	56923	Muscarinic acetylcholine Receptor M3	Biogenesis
439	56923	Muscarinic acetylcholine Receptor M3	Santa Cruz
457	152201	Thyrotropin Receptor	DPC Biermann/Acris
457	152201	Thyrotropin Receptor	Santa Cruz
459	152245	C-C Chemokine Receptor 2	Research Diagnostics
459	152245	C-C Chemokine Receptor 2	Santa Cruz
461	152299	Interleukin-8 Receptor A	Biosource
462	152299	Interleukin-8 Receptor A	Biosource
461	152299	Interleukin-8 Receptor A	R&D Systems
462	152299	Interleukin-8 Receptor A	R&D Systems
461	152299	Interleukin-8 Receptor A	Research Diagnostics
462	152299	Interleukin-8 Receptor A	Research Diagnostics
461	152299	Interleukin-8 Receptor A	Santa Cruz
462	152299	Interleukin-8 Receptor A	Santa Cruz
468	159973	Vasoactive Intestinal Polypeptide Receptor 1	Exalpha Biologicals
470	160040	Vasoactive Intestinal Polypeptide Receptor 2	Exalpha Biologicals
472	160055	Motilin Receptor (GPR38)	Santa Cruz



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503	160228	T-Cell Death-Associated Gene 8 (GPR65)	Santa Cruz
507	160312	Sphingolipid Receptor Edg5	Exalpha Biologicals
515	160329	Proteinase-Activated Receptor 4	Santa Cruz
535	161214	Galanin Receptor GalR3	Alpha Diagnostic Int.
537	161221	Urotensin-II Receptor (GPR14)	Santa Cruz
546	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Cayman
548	177191	Histamine H3 Receptor	Alpha Diagnostic Int.
548	177191	Histamine H3 Receptor	Chemicon
552	180956	Lysophosphatidic Acid Receptor Edg7	Exalpha Biologicals
562	189900	Sphingolipid Receptor Edg8	Exalpha Biologicals
628	190774	Histamine H4 Receptor	Alpha Diagnostic Int.
628	190774	Histamine H4 Receptor	Chemicon
636	190955	Leukotriene B4 Receptor BLT1	Cayman



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(71) Applicant (for all designated States except US): **LIFESPAN BIOSCIENCES, INC.** [US/US]; 2401 Fourth Avenue, Suite 900, Seattle, WA 98121 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BURMER, Glenna, C.** [US/US]; 7516-55th Place Northeast, Seattle, WA 98115 (US). **ROUSH, Christine, L.** [US/US]; 5301 Eight Avenue Northeast, Seattle, WA 98105 (US). **BROWN, Joseph, P.** [US/US]; 411 West Prospect Street, Seattle, WA 98119 (US).

(74) Agents: **KING, Joshua** et al.; Graybeal Jackson Haley LLP, Suite 350, 155 - 108th Avenue Northeast, Bellevue, WA 98004-5901 (US).

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS (GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH ANTIGENIC PEPTIDES

(57) Abstract: The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known antibodies.

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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/50107

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/12 C07K14/705 C07K16/28 G01N33/53

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K C12N G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EMBL, SEQUENCE SEARCH, EPO-Internal, WPI Data, BIOSIS, MEDLINE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ZHOU FENG C ET AL: "Production and characterization of an anti-serotonin 1A receptor antibody which detects functional 5-HT1A binding sites." MOLECULAR BRAIN RESEARCH, vol. 69, no. 2, 8 June 1999 (1999-06-08), pages 186-201, XP002222431 ISSN: 0169-328X figure 1; table 1 --- -/--	1-10, 15-26

☒ Further documents are listed in the continuation of box C.☐ Patent family members are listed in annex.

## \* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
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- "P" document published prior to the international filing date but later than the priority date claimed

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Date of the actual completion of the international search

6 January 2003

Date of mailing of the international search report

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Bucka, A

## INTERNATIONAL SEARCH REPORT

International Application No  
PL 17-US 01/50107

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>RAYMOND JOHN R ET AL: "Immunohistochemical mapping of cellular and subcellular distribution of 5-HT-1A receptors in rat and human kidneys." AMERICAN JOURNAL OF PHYSIOLOGY, vol. 264, no. 1 PART 2, 1993, pages F9-F19, XP001127496 ISSN: 0002-9513 the whole document, in particular figures 1, 3</p>	1-10, 15-26
Y	<p>--- VERDOT L ET AL: "PRODUCTION OF ANTI-PEPTIDE ANTIBODIES DIRECTED AGAINST THE FIRST AND THE SECOND EXTRACELLULAR LOOP OF THE HUMAN SEROTONIN 5-HT1A RECEPTOR" BIOCHIMIE, MASSON, PARIS, FR, vol. 76, no. 1, 1994, pages 165-170, XP008009332 ISSN: 0300-9084 the whole document</p>	1-10, 15-26
Y	<p>--- TODD E ANTHONY AND EFRAIAN C AZMITIA: "Molecular characterization of antipeptide antibodies against the 5-HT1A receptor: Evidence for state-dependent antibody binding." MOLECULAR BRAIN RESEARCH, vol. 50, no. 1-2, 15 October 1997 (1997-10-15), pages 277-284, XP002222432 ISSN: 0169-328X the whole document</p>	1-10, 15-26
A	<p>--- ECKARD C P ET AL: "CHARACTERISATION OF G-PROTEIN-COUPLED RECEPTORS BY ANTIBODIES" CURRENT MEDICINAL CHEMISTRY, BENTHAM SCIENCE PUBLISHERS BV, BE, vol. 7, no. 9, September 2000 (2000-09), pages 897-910, XP000984970 ISSN: 0929-8673 the whole document</p>	1-10, 15-26
A	<p>--- BACKSTROM JON R ET AL: "Generation of anti-peptide antibodies against serotonin 5-HT2A and 5-HT2C receptors." JOURNAL OF NEUROSCIENCE METHODS, vol. 77, no. 1, 7 November 1997 (1997-11-07), pages 109-117, XP002222433 ISSN: 0165-0270 the whole document</p> <p>--- -/--</p>	1-10, 15-26

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/50107

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>EASON MARGARET G ET AL: "Identification of a G-s coupling domain in the amino terminus of the third intracellular loop of the alpha-2A-adrenergic receptor: Evidence for distinct structural determinants that confer G-s versus G-i coupling."</p> <p>JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 270, no. 42, 1995, pages 24753-24760, XP002222434 ISSN: 0021-9258 the whole document</p> <p>-----</p>	1-10, 15-26

# INTERNATIONAL SEARCH REPORT

national application No.  
PCT/US 01/50107

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
Although claims 19 and 20 are directed to a diagnostic method practised on the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
1-10, 15-26 (all partially)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: claims 1-10, 15-26, all partially

an isolated antigenic peptide having the amino acid sequence SEQ ID NO: 692, nucleic acids encoding said peptide, antibodies directed against said peptide, kits containing said antibodies

Inventions 2 to 1600: claims 1-26,  
all partially and in so far as applicable

each separate, individual invention relates to an isolated antigenic peptide, nucleic acids encoding said peptide, antibodies directed against said peptide, kits containing said antibodies,  
wherein invention 2 is represented by the peptide having the amino acid sequence SEQ ID NO: 693,  
invention 3 is represented by the peptide having the amino acid sequence SEQ ID NO: 694,  
continuing to invention 1600, which is represented by the peptide having the amino acid sequence SEQ ID NO: 2292

Invention 1601: claims 27-66

a method of identifying an amino acid sequence of an antigenic peptide derived from a candidate polypeptide, peptides identified by that method, antibodies directed against said peptides



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